THE GENESEE FARMER.

Agriculture is the most Healthy and Honorable, as it is the most Natural and Useful pursuit of Man.

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Rural Science and Economy.

ANALYSIS OF MAIZE, OR INDIAN CORN.

PRIZE ESSAY. History and Chemical Investigation of Maize, or Indian Corn. By J. H. SALISBURY.

Mr. S. deserves the gratitude of his country for increasing its knowledge of an indiginous plant, which is extensively cultivated and more valuable than any other grown in the United States. Thanks are also due the New York State Agricultural Society for its liberal premium of $300, which has elicited so important a contribution to Rural Science from an indefatigible American chemist. It is the privilege of practical farmers to avail themselves of the material facts disclosed by these researches; and it is to aid them in that regard that the present review of the labors of the author is written.

The Essay forms over 200 pages in the volume of Transactions of the State Society for 1848: and is equally large when published separately, in which form the author has very properly secured a copy right. The work deserves and will command an extensive sale.

In the first twenty pages, we find an exceedingly interesting history compiled from authentic sources, of *Maize*, or *Indian Corn*, showing it to be a native of American soil, and unknown in Europe, Asia or Africa before Columbus discovered the New World. Maize was extensively cultivated by the Indians alike in North and South America and the West Indies, at the time Europeans first visited and planted colonies in this hemisphere. The vast and peculiar capacity of this plant, which belongs to the cereals and family of grasses, to sustain a dense population, is hardly begun to be appreciated. As the human race increase on the earth and acquire a higher standard of comfort, calling for more breadstuffs, meat, butter and cheese, the superiority of Maize over all other plants, whether for its forage or its seeds, will be seen and acknowledged by all. So long as our soil and climate shall produce cheap corn, and cheap cotton, human food and raiment must greatly abound in the land. These will command beyond all contingency, a population more numerous than any thing which Egypt, Asia or Europe has ever witnessed. Providence has given to the New World agricultural capabilities, peculiar and superior in many respects, for the economical production of bread, meat, milk, wool and cotton. As a people, a peculiar destiny awaits us; and that destiny has for its broad, enduring and honorable basis, *the science and the art of agriculture*, wisely adapted to American sunshine, seasons, plants, and the wants of civilized man. But we wander from our text. Let us return to the Chemical Investigation of Indian Corn.

Till it approaches maturity this plant contains a large per centage of water in its stems and leaves. When ten days above ground, young plants yield over 89½ per cent of pure water, if cut off even with the earth and perfectly dried. 100 parts of dry plants give over 13 of ashes. At 25 days from planting, the proportion of water was less than 87 per cent; and the ash 10.7 per cent. Young corn stalks gave 94 parts of water in 100. The more rapidly any plant grows, the larger the proportion of water which it contains and also of alkaline and earthy salts. The crop planted on the 3d June gained most in the week preceding the 16th of August, when the ears were forming. The gain in weight in seven days was 2953 grains in a single plant: equal to 436 grains a day and 18.16 per hour. At this period in its development Mr. S. found 91 per cent. of water in the stalk; 83 in the leaf; 89 in the sheath; and 64½ in the tassel. Calculated dry, the stalk gave 10.7 per cent, ash; leaf 11.16; husks 6 per cent.

From observation and experience, we have long been in favor of partly drying green corn, rye and clover, before feeding either to milch cows, horses, oxen or mules. There is an excess of water in such food which should be evaporated by the skillful and partial curing of green forage. The addition of a little salt will render it more digestible and nourishing to the system. Corn is a valuable grass and hay plant in every State in the Union. In this relation it has not received that careful study and attention which its importance demands.

One of the most interesting features in the growth of Maize, as disclosed by the admirable researches of our author, is the great change in its incombustible elements at different stages in its life. Up to July 19, the stalks were quite brittle and had but a small quantity of silica or flinty covering around them. After the time named, silica increased rapidly in the stalk and gradually in the leaf. On the 12th July the leaves gave their maximum of phosphates. These diminished as the kernels were organized. As silica (flint) is of no account in the animal economy, and the raw material for forming seeds exists diffused through the plant when the kernels

begin to grow, then is the time to cut and cure it for forage. After the maturity of the seeds, the leaves contain only one fourth as much of the phosphates and nutritive matter as they did before. This remark is particularly designed for our Southern friends, who waste valuable time in "pulling fodder;" when more and better food for stock might be had for half the labor.

The change in the amount of potash, soda, magnesia, lime, sulphur, phosphorus, chlorine, &c., are curious, and highly interesting to the critical student. For these, we must refer the reader to the Essay itself. Allowing 3 plants to a square yard, white flint corn will take in round numbers 382 pounds of earthy minerals from an acre in a crop. Omitting fractions, as we do, the figures stand thus:

Silica,	158 lbs.
Phosphates of Iron and Magnesia,	72
Potash,	46
Soda,	47
Lime,	12
Magnesia,	7
Chlorine,	15
Sulphuric Acid,	23
	382

Analyses of the ash of the kernel at different stages, of the cob, stalk, husks, sheath, roots, leaves, silk, tassel, &c., are given, which we pass over to notice briefly the "Proximate Organic Analyses of the several parts of the plant at different stages of its growth." It should be stated that the seed was planted on the 3d of June; that the crop was ripe on the 18th of October; and that the nutritive elements were searched for mostly between August 2d, and October 18th. On June 21st, when the plants were 10 or 11 inches high and made up of leaves, they contained 33 per cent of sugar and extract, calculated on the dry matter. The sugar and extract amounted to over 25 per cent on the 2d of August. From August 23d to October 18th, the decrease was about 19 per cent. The ripe sheaths are richer in nitrogen than the unripe ones, but contain less sugar extract and dextrine. "The plant during the period of tasselling, owing to the very large per centage of sugar and extract, with the respectable quantity of albuminuous matter and dextrine which the stalk, leaves and sheath contain, must afford very palatable as well as nutritious fodder." In kernels there is a gradual and very uniform decrease of sugar and extract from their earliest growth till they mature, and a corresponding increase of starch. Albuminous matter also gradually increases, as the kernels advance, and at the same time casein (cheese) diminishes.

September 6th kernels are in the early stage of milk. Cob at this period is rich in albumen, casein and dextrine. These bodies accumulate at the base of the young seeds. As the kernels grow the albumen, casein and dextrine decrease rapidly in the cob. In comparing the leaves, sheaths (which surround the stalk,) stalk and cob with each other, if we judge of the value of each by the per centage of matter soluble in water and alcohol, then in nutrient bodies leaves rank first, sheaths second, stalk third, and cob fourth. Of the latter, Mr. Salisbury speaks in terms more favorable than our observations have led us to believe were strictly warranted.

We have given but a meagre synopsis of this most compact and valuable Essay to which we shall often have occasion to turn for reliable information.

AGRICULTURAL CHEMISTRY.

One of the most useful and scientific lecturers on Agricultural Chemistry in England, is J. C. Nesbit, Esq., F. G. S., etc. Speaking of farm yard dung, feeding sheep, and plowing in green crops, &c, he offers the following important suggestions:—

"Let us begin with the far-famed farm-yard dung, which is supposed to be so superior to all other things. It is that which grows the crops, and which, in the estimation of the farmer, is not surpassed by any possible combination of substances. Now, what is this farm-yard dung? It is formed by acting upon vegetable matter in some way or other. You either take a quantity of vegetable matter, and pass it through the stomachs of animals, where it is acted upon and the refuse pass out, or you put vegetable matter—as straw, or litter—in the yards, and allow the excrements of animals to be mingled with it, and a slow decomposition to take place. The whole being commingled and mixed together is known by the name of farm-yard dung. Now, a very little consideration will show that the whole of the material which is found by you, gentlemen, to be practically so useful on the farm is merely derived from vegetables; so that you are, in fact, applying the remains and refuse of vegetables to renovate the land. This is the whole secret of farm yard dung: it is vegetable matter, which, when partially decomposed, is re-applied to the land, where it forms vegetables over again; so that you are continually working as it were in a circle. Thus the same particles of matter imported on the farm perhaps in the shape of oil-cake, first re-appears in the shape of a turnep, again as barley, now as beet-root, now as wheat—the cycle of changes continues until the identical particles are exported from the land as beef or mutton, or as grain.

Now I hope I shall be able to offer one or two ideas with respect to the origin and nature of this farm-yard dung: and let me say we can never have our ideas too near the truth respecting the origin and nature of that which is so constantly under our notice. Some gentlemen have got an idea that animals have a mysterious power—of what nature it is impossible to say, but they imagine that it really exists—a mysterious power, by means of which they can change a turnep, or a quantity of oats or greens, into a superior manure for land; and that food must have passed through the animal before it can be really useful on the land. That is the idea entertained on this subject by ninety-nine farmers out of a hundred. I must proceed this evening to disabuse your minds of that erroneous notion; I must inform you that the manure obtained from animals is always dependent as regards its value on the food which the animal eats; and that the excrements of animals are always less valuable, and less powerful in manuring principles, than is the food consumed by those animals while producing the manure; that green food plowed into the land, will give more manure to the land than the same food eaten by animals. Not that I would recommend you, as a rule, to plow in your vegetables; but I wish you to remember that your sheep can deposit nothing on the land but what they have first received from the food; and that under all circumstances, the amount deposited will be less than that received. Now let us look a little at this point. You know that in one of our ordinary fire-places, when coals are put into the grate and a light is applied to them, an action takes place which makes the air above differ from that below the fire: without any mention of the name of a single chemical element, you have only to apply your plain common sense in order to be aware that an action takes place between the air and the coals producing heat, and that the air above the coals (in the chimney) is very different from the air below the coals, which enters at the grate. Now you give an animal a certain amount of food; that food is taken into the system: the constant action of the lungs, which inspire and expire the air, has the effect of bringing into the system a large amount of air. This air acts upon the food which is taken into the system. By the combustion or burning of a certain amount of that food, animal heat is produced, which keeps up the temperature of the animals, so that they get a higher temperature than the surrounding atmosphere. The expired air contains the result of that combustion, and resembles in composition the air of the chimney; another portion of food not used for producing animal heat is laid upon the bones, forming muscle, or fat; and what the bullock itself has no use for is cast out of the system. Now, you observe at once that the animal,

by acting in this way on the food, actualy deprives it of certain constituents, and at the same time makes it less in amount; so that, in fact, the only real action is one which takes away certain portions of the food and renders the others more quickly soluble. All the soluble parts of the food are passed out in the urine, and all the insoluble parts in the excrements. There is a regular process performed in the laboratory of the stomach, the effect of which is what I have thus described. Now, the same thing takes place in the decomposition of vegetable matter. You lay down a large quantity of straw, and you let the water fall upon it, as well as the excrements of animals. You all know what takes place. The heap gradually heats, and this gradual heating is nothing more than the effect of the gradual action of the air upon it. Certain portions of the vegetable matter thus acted upon by the air are consumed and taken away, and the bulk becomes less; so that, even in the process of acting on vegetable matter, you loose a portion, and it goes off into the air, just in the same way as the solid parts of coals pass into the air by means of the chimney. You all know that the solid parts of coal disappear and leave nothing but ash behind. The two cases are, in fact, identical. I may refer you to the case of a hay rick put up in too damp a state. In that instance, an immediate action takes place from the contact of the air with the moist hay, and that action continues increasing, until, at last, the whole bursts into a flame. Now, gentlemen, in either case, in the making of manure, there is a diminution and a loss. You must have seen the rock going off from the dung-heap, and there are other substances which also disappear in the air which you cannot see. If what I have stated be true, you will draw the conclusion for yourselves, that vegetables plowed at once into the land furnish a greater amount of the substances adapted for the vegetation of plants than they would supply if passed through the stomachs of animals—that is to say, to give a plain, practical illustration of my meaning, if you chop up an acre of turneps, making them sufficiently small for decomposition, and plow that acre of turneps into the land, you will have more manure in the soil than if you fed a flock of sheep upon it, without the addition of oil-cake or any other extraneous manure.

Again, take any other green crops, such as rape, and plow them in, and you will have a larger amount of substances calculated to bring forth the next crop than if you passed that acre of rape through the bodies of animals. You may call this theory, gentlemen, but it is absolute fact: there is no theory about it. It has been tested by practical men, and I will give you one or two instances. A gentleman heard me make this statement when I was lecturing at Maidenhead—and let me remark that the gentlemen who composed my audience on that occasion were not quite so decorous as you gentlemen have shown yourselves this evening: for I heard some of them call what I said "gammon." (Laughter.) Now, notwithstanding its being "gammon," a certain gentleman determined to try whether or not the case was as I had represented. A gentleman named Mr. W. Trumper, of Dorney, near Windsor, having twenty acres of rape, plowed in one or two acres in different parts of the field. The rest was fed off by sheep. These sheep were luxuriating every day on a beautiful meadow adjoining, and were folded at night on the rape. I was invited last midsummer but one to see the effect of this experiment: and about a dozen practical men were invited to meet me upon the occasion. The land was gone over, and I could point out every place where the rape had been plowed in. The wheat stood eight or ten inches higher than the rest; and in the judgment of these practical men there was more than a quarter of an acre difference between the places where the vegetables had been plowed in and the places where the sheep had been fed off. More than that, I happened to meet Mr. Trumper at the annual dinner of the Reading Farmers' Club, when he told me the turnep crop succeeding was much better, and he fully expected to see it in the barley.

Now, there can be no doubt, the plowing in of turneps will have a similar good effect, and perhaps many of you gentlemen have in your recollection certain instances in which, owing to the severe frost rotting the turneps, it was necessary to plow them into the land; and when, contrary perhaps to the expectation of the farmers, a capital crop of barley was the result. I would not recommend you to forsake the feeding of sheep; I am now merely dealing with the facts of this case. It is a question of pounds, shillings and pence, whether it is best to feed the turneps off or to plow them in, and therefore a case for the exercise of your individual judgments. In the instance of which I was speaking at Maidenhead it was found more favorable to plow in than to feed off, as that year the crops were excessive and the sheep high in price. A gentleman there was actually offering to give £2 an acre to any person who would send a flock of sheep on the farm to feed off the turneps. I at once saw it would be better to spend 15*s.* per acre for plowing in, and 25*s.* in guano, as the crop of barley would assuredly be better. Now, gentlemen, at the end of the lecture I shall be happy to hear any observations which may occur to practical men on this point, and to answer any objections which may be urged; and it must be particularly noticed that I leave out of the question for the present the mechanical action of sheep in treading the land, so necessary on some soils, and speak merely of the absolute amount of manure. To pursue the subject of this manure a little further, you see at once that the manure will vary as the food varies. If you use straw, or oil-cake, or turneps, the quality of the manure will vary accordingly, as the composition of these substances varies; and it will vary because the animal takes away only a certain proportion from each of these, and casts out the remainder as excrements. But the manure will vary not only as the food varies, but according to the age of the stock."

Young animals extract more nutriment from their food than old ones, especially if the latter be fatted. But it is more profitable to have the grass, roots and grain eaten by an animal, transformed into *flesh*, by its growing and gaining in weight, than to have the elements of flesh in richer manure. The difference between feeding 1000 pounds of clover, rape or turneps, (estimating the crop dry,) to sheep or cattle, and plowing in the dung and urine yielded by the quantity of food named, and plowing in the crop without being eaten at all, is this: In the latter case, the soil below the surface gains 1000 pounds of vegetable matter; in the former case not far from 400 pounds including the salts in the urine which falls on the ground. Although 2000 lbs. of dry forage will yield only some 800 of solid excrements; yet the latter are worth more for all agricultural purposes than 800, or even 1,200 pounds of the vegetables from the consumption of which the dung and urine were derived. It will take at least 500 lbs. of dry corn or wheat to form 100 of the dung of pigeons. Their dung is the *ash* of the seeds consumed which like wood in a stove were literally burnt in their capacious lungs and circulating blood.

The true rule in reference to feeding off clover and grass, or plowing them in without feeding is this: When a soil is reasonably rich in mold, (organized matter,) it is good economy to pasture clover or grass, closely, before breaking up for wheat or other grain crops—leaving the droppings of the animals on the land to fertilize it. On the contrary, when the soil is thin and poor in vegetable mold it is sound economy to turn in all the grass, clover, pea vines or buckwheat one can. A friend of the writer will plow in three crops of buckwheat this season; and another capital farmer will turn under a crop of winter rye, one of oats and another of peas, to enrich the soil.

Some apply a coat of caustic lime to sweeten the decaying vegetation. We have so often explained in public lectures and agricultural journals, the process by which cultivated plants draw their mineral food from the sub-soil, and their organic nutriment in a good degree, from the atmosphere, that it seems unnecessary to repeat the story. And yet, the great body of American farmers, both North and South, have hardly commenced enriching their estates by fertilizers taken from the air above and the earth below, which a bountiful Providence has furnished ready to their hands. Here and there one has stum-

bled on the discovery that the lifeless earth thrown out of a well, a cellar or deep ditch, has fertilizing qualities. Such marls without vegetable matter will often grow grass, wheat and corn—evidently deriving carbon from the atmosphere, in rains and dews. The riches in the sub-soil, which deep draining and sub-soiling will develope, are not at all appreciated.

FAIR OF THE STATE AGRICULTURAL SOCIETY.

In many respects the Fair at Syracuse excelled all preceding ones of the Society. Several thousands of visitors were in attendance more than were ever seen at any previous Rural Festival in this State, or the Union. The general and deep interest taken in these annual exhibitions of the choice products of agricultural and mechanical skill, indicates a juster appreciation of the character and importance of the Farmers and Mechanics of the country. Instead of being looked down upon with ill-concealed contempt, as something servile, by the learned, the wealthy and the distinguished, productive industry is now beginning to be looked *up to* as the source of all power and property in the land. This is looking in the right direction. The union of highly cultivated intellect with manual labor, successfully exerted in the field, the garden and the work-shop, makes a new era in the history of agriculture and the mechainic arts.

To foster both mental culture and artistical improvement, annual Fairs are of inestimable value. They furnish cheap and agreeable facilities, by which fifty or one hundred thousand people may teach each other a thousand useful lessons. Farmers see, and have an opportunity to purchase, hundreds of new contrivences for abridging human toil in all tillage, haying and harvesting operations. Improved implements of husbandry constituted a prominent feature of the exhibition at Syracuse. Manufacturers and dealers from Boston, Albany, Geneva, Rochester, and other places, made a large and attractive display. It is impossible for us to give full particulars, where the articles exhibited are so numerous, and often complicated in their structure. We shall publish a list of the premiums, which will give names, residences and opinions of competent judges.

Several Agricultural Warehouses were very fully represented. Rapalje & Briggs, of Rochester, exhibited a great variety of superior implements, machines, tools, &c. They received the premium for the greatest collection—embracing implements of husbandry of all descriptions. The Albany Agricultural Warehouse, (H. L. Emery,) was largely represented, as usual. Among the implements from this establishment we saw, in successful operation, the one and two-horse Railroad Powers, threshing grain with the well known overshot thresher—sawing wood with the portable Saw-Mill, and cutting stalks, hay, straw, &c.—without any apparent exertion of the horse, except keeping in motion on the inclined plane. Mr. E. also exhibited some 30 plows, 18 hay cutters, 6 corn shellers, and 12 churns of different patterns and prices; two of Emery's corn and seed planters, and any quantity of Partridge's celebrated cast-steel hay and manure forks, many of them of extraordinary high finish. The articles from this Warehouse amounted to upwards of $2,200, over $1,600 of which were manufactured in this State. The proprietor has put in operation, during the past season, one of the most extensive machine and implement manufactories in this country, which is now so pressed with work as to be in constant operation, day and night. E. J. Burrall, of Geneva, exhibited a large assortment of well made machines and implements—among them some new inventions and improvements, which we think will prove of great value. He obtained the premium for the greatest and best collection manufactured within the state.

Of Neat Cattle the show was highly creditable, there being some 300 on the ground. Mr. Hiram Sheldon, of Cayuga, exhibited a fat ox which weighed 3,400 lbs. Others only a little smaller were present. A fat cow which had been spayed, weighed 2,200 lbs. There were several yokes of matched oxen which attracted much attention. Mr. L. G. Morris, of Westchester, had 11 head of grades and pure blood cattle at the show. Mr. Sotham, of Black Rock, had a fine lot of Herefords. The Devons, however, were more numerous than any other breed, and seemed to be quite popular. Those exhibited by Messrs. Bingham, Washborn, and others, attracted much attention. The short-horn Durhams appeared to good advantage, and we believe sold well. Mr. S. P. Chapman, of Clockville, exhibited several very fine animals—among others, his bull "Buena Vista," (portrait and pedigree in our August number,) and cow "Charlotte." Col. Sherwood exhibited the animals imported by Mr. Stevens, and noticed in August number of Farmer. Messrs. Z. B. Wakeman, of Herkimer, Bell of Westchester, and other gentlemen, contributed to the show of short-horns. We were not present at the sale of stock.

The show of stallions, brood mares and colts, and of matched and single horses, was decidedly the best that we have ever seen in the State. We regret that we are unable to particularize.

Of Sheep we counted some fifty pens, and altogether the number on exhibition was unusually large. Merinos, Saxons and Southdowns were most numerous. Some of these were choice animals. There were a few mammoth Leicesters from Canada.

Swine were not numerous, nor particularly noteworthy. There were a few extraordinary fat pigs and large hogs, of both sexes.

In Poultry the show was barely respectable.

Dairy products were less, in the aggregate, than we have witnessed at preceding Fairs. The cheese looked tempting, but we did not belong to the "tasting committee" in that department. The butter was small in quantity, although handsomely put up.

In wheat flour there was a pretty sharp competition; but in corn meal the Georgia State Fair would have beaten the samples out of sight.

Stoves, household manufactures, needle work, and other fabrics of fancy or utility were almost endless in variety and beauty.

Floral Hall was neatly arranged, and embraced a fine display of fruits, flowers, vegetables, &c. This department, and the Pomological Convention, is more particularly noticed in our Horticultural pages.

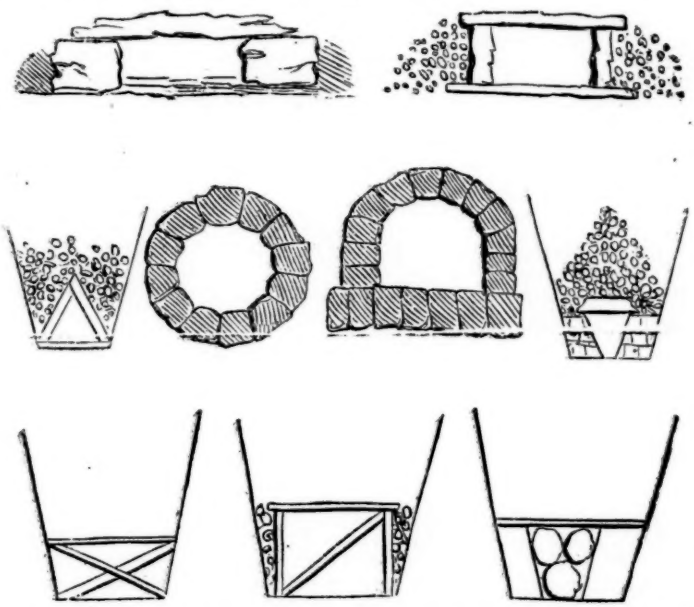
We did not hear the address of Prof. Johnston—although, by competent judges, it is spoken of in terms of the highest praise. Of course it will be published.

Many gentlemen of distinction from abroad, were present—and all with whom we conversed, expressed themselves instructed and gratified by what they saw at the Fair. The grounds and buildings, tents, &c. were well arranged; and good order was preserved, considering the unusually large number of persons in attendance—reflecting much credit upon Col. Johnson and other officers of the Society.

THOROUGH DRAINING.

One of the most valuable papers in the large volume of Transactions of the N. Y. State Agricultural Society for 1848, (which volume is an honor to the Society and Country,) is an article on the subject of *Thorough Draining*, from the pen of John Delafield, Esq., of Seneca County. Our columns are too much occupied in this number to admit the re-production of all that Mr. D. has written on this subject in the work before us. He gives a lucid and interesting account of the geological character of the soil and rocks of his county, and clearly indicates, from personal observation and experience, the necessity of under-draining to remove the excess of water in the subsoil, which greatly impairs its adaptation to wheat culture. After stating that all main drains should be at least *three feet deep*, and lateral ones thirty inches, he adds:

"Many and various are the contrivances used in the construction of drains, and as usual, in all projects used as *expedients*, they are faulty, and soon become useless. Among the most approved are the following:



Drains made by masonry are intended for *mains*, but they are too expensive for our farms. The square stone and the triangular stone drains are probably the best, where stone of proper dimensions can be procured on the field to be drained. If however, stone is to be hauled from any distance, then a tile drain, which will be described presently, is much the best and cheapest. The other drains, as figured, have been used with success, *while they lasted;* but few ever perform their duty above two or three years.

In all matters affecting our property, any prospect for its improvement needs a very scrutinizing examination, that we may first be assured of its necessity, and then the best and cheapest manner of accomplishing the change. The necessity for improvement by draining has, I hope, been clearly demonstrated; and the best method for locating and opening drains has been indicated; it is now intended to draw your attention to the most approved drain of the present day.

When you have judiciously marked out your field to be drained, and staked the course of the several trenches, let them be accurately dug at least three feet deep, and not over thirty feet asunder, for thorough draining. The trenches or ditches must run *down* the slopes, and *not across* them, that the water may go off freely. Dig the trenches as narrow as may be, so that a man can clean out the bottom and construct the drain; the width at bottom for the main drains need not exceed ten inches, and for all other drains not to exceed seven inches. Be careful to have the grade on the fall of the water not less than one foot in one hundred—remembering that a greater fall will more readily prevent the accumulation of sediment. Cut the main trench first all the way through the field, and do not lay in the materials until you have ascertained that the dimensions and grade are correct throughout. You are now ready to construct the drain *with tyles* of a semi-cilindrical form. These tiles are made of burned clay of various lengths, from 12 to 13, 14 and 15 inches, the width and height being 2¾ by 3¼ inches, and 4 by 5 inches. When these tiles are well made they are smooth and heavy, and ring when struck with a hard substance. They are so strong that a man my stand or leap on them without breaking them. The drawing now exhibited will explain the form of the tile, and the manner of laying them in the trench:

You will perceive that the tiles are laid upon flat tiles, called soles, and this is brought to your notice,

because in this country, drains have been made without any support for the tile, where the bottom has been a hard clay. This practice does well for a few years, but it must be evident, that if the drains ever carry a rapid run of water, the tiles must inevitably sink, more or less, by the wearing of the bottom, and thus in time destroy the drain. To prevent this mischief, soles are made of convenient widths and lengths on which to set the tiles, taking care to avoid placing the joints in contact, by which arrangement the tile has a firm and uniform bearing. Having your tile conveniently placed along the trench, they must be laid with due care, first cleansing the trench, so that the soles may lay solid. The tile being laid, it is best to cover the whole with a turf sod, and fill the trench with your plow or shovel, as may be most convenient. Many use straw to cover the tile, but a turf cut about 18 inches long and 12 inches wide, will just fit and perfectly cover them, with the grass side down. The larger and smaller drains are all thus constructed, and when properly made, will never need repair or further attention.

You must have noticed that for thorough draining the trenches are directed to be dug at distances thirty feet apart: and this is probably the greatest distance at which drains will act so as to *draw* the water from the earth; in this respect we must be guided by the character of the soil, and experience will probably teach us that a distance of forty feet is an extreme limit for *very thorough* draining.

This is the method of draining now so extensively used in other countries, and about to be extensively adopted in our own; and these tiles are found to be far superior to masonry, to stone, to wood, or any other kind of drain hitherto tried. It is this system or method which has enabled the farmers of England and Scotland, of late years, to raise twice the numbers of bushels of wheat from an acre, more than we do. It is true, necessity has claimed from them great exertions to feed their over populous islands, and *necessity* being a sharp master, has elicited, and will continue to bring forth, every talent useful for the comfort of man. Let us for a moment examine the action of this master motive among English farmers; and we learn from our talented countryman, Professor Norton, now attached to the chemical and agricultural department of Yale College, that he spent much time in Great Britain examining their agricultural systems. Since his return, he tells us he visited the farm of Mr. Dudgeon of Spylaw, at Kelso: the surface of his farm was stiff, the subsoil a close clay. Mr. Dudgeon had drained about 900 acres!! making a distance of drains equal to 300 miles! he erected a tile work on his own farm, which turned out not less than 400,000 tiles in a year. The drains which he laid raised the rental of his land immediately, from $2,50 to $6,50 per acre, and after enumerating other successful results from tile draining, Mr. Norton says, "I have known instances in Scotland, where the *first crop* repaid the whole expense of the improvement." And again, at an agricultural meeting held at the farm of Sir Robert Peel, a farmer declared that "he could not afford to deprive himself of the benefits of drainage; for he had drained portions of his ground at a cost of from $8 to $12 per acre, five feet deep, with one inch pipes, and the very first crop of wheat remunerated him for the whole cost." So also, close at home, gentlemen, we have an instance of very successful drainage; one of our own enterprising farmers has done nearly as much in point of value, though less in extent.

The inquiry as to the expense or cost of these drains, now demands our attention. Not long since, pattern tiles for drains were procured from Great Britain, and tiles of two sizes have been made and used in Seneca county. The cost has been at the rate of twenty cents per rod for the smaller size, and forty cents per rod for the larger tile; soles have not been used.

We have seen that thorough draining requires drains at parallel distances of 30 feet; let us say of two rods or 33 feet, then an acre would need seven drains of 13 rods each in length, in all 91 rods; this at 20-100 for the tile gives, say - - $18 20
Add for discharge, laying, &c. 18-100 per rod, 16 38

Making the lowest cost per acre, . - - - $34 58
and 38 cents per rod."

Before we proceed, let us examine and compare the cost of making a common stone drain, the stone being on the field to be drained. Thus, a man and team will draw stone in one day sufficient to build about 5 rods of drain, - - - - - - - - $1 50
Cost of laying the stone at 6-100 per rod, - 30
Cost of the trench at 18-100 do. - 90

Cost of 5 rods common stone drain, - - - $2 70

or 45 cents per rod, thus shewing a difference of 16 cents per rod in favor of the drain tiles. To facilitate your calculations of cost of the tile, I would state that for every acre, drains cut

	12 inch tiles.	13 inch.	14 inch.	15 inch.
At 15 feet apart, require,	2,904	2,681	2,489	2,323
30 do. do.	1,452	1,340	1,245	1,162
33 do. do.	1,320	1,218	1,131	1,056
36 do. do.	1,210	1,117	1,037	968

The great cost per acre under either of these systems, requiring capital for the outlay, and notwithstanding the rapid return of the cost by the additional products, presents a serious impediment to their general adoption, and compels us to seek some method for the more economical supply of tiles. This can and will be done, and in the course of another year these tiles will be afforded at a cost of 15 cents per rod or less. This is to be accomplished by machinery, and I am pleased with the authority to say that a machine is now making in England for use in this county (Seneca) which will make from 8 to 10,000 tiles per day of perfect form and solidity. The most eminent agriculturists of Great Britain have been consulted in reference to this particular machine, and no doubt is entetained, but it will lead the way to an economical supply of tiles for draining. Labor in this country is too costly in proportion to the products of our farms. We are now, and for a long time will be, compelled to tax our ingenuity to place the farmer on a level with other pursuits, where the profits are larger, admitting higher prices for labor. Let us however, be thankful and content, for if our profits are not so large, we have reason to believe they are more sure and enduring than is derived from other professions.

Machinery is to accomplish our much desired object, and we will close this too extended notice by exhibiting a few results to be derived from it. Supposing that as farmers we are as intelligent as the English and certainly not less industrious, if, then, we determine to drain by means of tiles, a field of ten

acres, and that the machinery about to be introduced, or any other machine, enables us to procure tile at a cost of 12 cents per rod, the cost of our drains made in a lasting and perfect manner, would be at the rate of 30 cents per rod, or $27.30-100 per acre.

A field thus drained and cultivated may reasonably be expected to yield an increased ratio, equal to an English field, all things else being equal. Then, if our average crops have been 20 bushels per acre, (and many of our farms range much higher,) we shall now receive 40 bushels. But suppose we obtain only 30 bushels per acre, you will easily see that the profit has been increased from about $8 per acre, to $18 per acre. In other words, the field of ten acres, at a cost of $273, gives a return in nett profits of $180.

One acre yielding 20 bushels ot $1 - -	$20 00 undrained
Cost of cultivation, - - - - - - -	12 00
Profit, - - - - - - - - - - -	8 00
Increase product by draining say 10 bu.	10 00
Total profit when drained. - - -	$18 00

Then 10 acres will give $180, a ratio which soon returns the outlay. There is room here for large deductions, and yet leave us well satisfied with the benefits of thorough draining; and from the facts given every man can make his own estimates as to the value of the benefits claimed.

In conclusion, let me say, that your plants when thus protected from excess of moisture, will obtain a more vigorous growth with a firm straw, preventing in a great degree its lodgment by storms. The grain becomes more plump; it ripens *uniformly*; and of course it is heavier per bushel. The straw possesses the elements of better fodder for your cattle and sheep, and makes better manure. Your fallows will be more easily and earlier worked; they will be less infest with weeds, and your plow may run much deeper.

Such, gentlemen, are the advantages which have been again and again derived by others. Why then may not each one of us, be at least as fortunate? It may be urged that few farmers can spare so large an outlay on their farms, as we have spoken of; true, I admit it; but let us remember that our freedom was not obtained in a day, nor do I believe in the benefit, comfort or advantage of steam car speed in our farming operations. Caution is always necessary, and I would not advise any farmer to undertake the draining of more than one or two acres at the outset.—Sure, from what I have seen and learned, that he will double the quantity every spring or autumn, until his farm shall always blossom and bear fruit, from every acre, far beyond his needful wants."

CASTOR OIL PLANT.—(Bicinus Communis.)

BY WILSON HOLT, OF ILLINOIS.

THE territory of country engaged, even partially, in the cultivation of this vegetable is quite limited —being confined for the most part to Southern Illinois and a small part of Missouri, with perhaps an isolated county here and there in some of the Southern States. This narrow territory is not the result of uncongenial climate, for it can be successfully grown as far north as Maine, where it is sometimes seen in gardens as an *ornamental plant*. The cause of the circumscribed territory is partially the result of want of information on the subject of growing it, but more particularly the limited demand, which is often more than supplied by the small section of country in which it is known and raised. It is cultivated entirely for the seed, no other part of the plant being of any use except for manure, perhaps, which is not here regarded.

The season of planting ranges somewhere between the middle or perhaps the first of April and the early part of May. The earlier the better, if the season be favorable, as it is killed by the first frosts of autumn. The crops, therefore, depend very much upon the time the season of harvesting commences. The ground in which it is planted should have a deep rich soil, deeply and thoroughly plowed, and the surface finely pulverized. After it is well prepared, it should be laid off in parallel rows both ways, not less than four feet each way, and every fifth row six feet one way for the convenience of harvesting. If the seed be good, four beans in a hill are enough to plant unless there is a prospect that the cut-worm will be troublesome, in which case eight or ten will not be too many. At the end of two weeks after planting, now and then one will be seen pushing its way through the earth to the light, and in four weeks nearly all will appear. Some practice soaking the seed three or four days before planting, which practice is a very good one. It brings forward the crop, which is an important consideration. When the plants are about six inches in height, the hoe and plow should be often and thoroughly used among them, that the earth may be kept loose, and the grass and weeds in due subjection. Twice hoeing is commonly sufficient, and even one may do very well in clean ground if one be skilful in the use of the plow.

The labor of raising the Castor Oil Bean up to the period of harvesting is about the same as is required by corn. The appearance of the plants at first is very dimunitive, bearing no sort of comparison to their ultimate height and magnitude. They often attain the height of eight feet, and with their numerous branches and massive leaves present quite a formidable appearance. I have many plants on my farm that now measure full eight feet in height, and promise yet greater elevation.

The number of plants allowed to remain in a hill should not exceed two, and many who have had much experience in the business say that one in a hill is enough. Mine, this season, were thinned down to one, and in many parts of the field are nearly as dense as a cane brake. I am of the opinion that, as a general thing, one will be found more profitable than two. Two may produce more beans in the fore part of the season, but take the whole season as a criterion, one will give the larger crop. One throws out far more branches in proportion, and produces much larger cones of bolls.

The harvesting season usually commences about the middle of August, and continues until "Jack Frost" summarily despatches the whole crop remaining. At the first the labor of harvesting is comparatively light, but when the season fairly sets in, four acres will keep one hand quite busy. The process of harvesting is usually as follows:—a plat of ground several yards square is cleaned off and made as nearly smooth as can be, called the "popping ground," where the beans are taken to be "popped out." A horse attached to a one horse slide or sled is driven along the wide spaces already mentioned, and the beans gathered and taken to the ground. The beans do not grow in long pods like most beans, but in diamond shaped bolls, generally containing three beans each, attached to a stem like grapes.

Many of the clusters of bolls are twenty inches long, and I have seen those that measured two feet; and all are nearly in the form of a perfect cone. The beans in the bolls are separated from each other by a thin membrane, and the bolls are armed with very flexible spikes. The clusters are cut with a knife, and when the beans are ripe the bolls contract, when the beans "pop" out with a smart report, often shooting several yards. After all have been gathered and popped out, they are separated by passing them through a fanning mill. Thus ends the labor of harvesting.

The average yield is sixteen bushels, and twenty-five is a good crop. The price per bushel may be set down at $1, though it often varies both above and below. Last year as high as $1,40 was paid, and $1,75 has been paid this year for old beans. The price will be good this year owing to the ravages of the cut-worm among the plants in the spring. The oil is extracted from them by means of screw presses similar to those used in extracting oil from flax seed. I believe two gallons is the produce of a bushel of beans. When beans are worth a dollar per bushel, oil sells at one dollar per gallon at the mill.

Now for a brief botanical description of this plant. The leaf is palmate, simple, with lanceolate lobes acutely serrate on the margin. Position of the leaf horizontal on a strong, round petiole. Connexion of petiole with the leaf, peltate. Culmor stem articulated and branching. Root palmate. The Castor Bean is about the size of the common garden bean, of a brownish color mottled with darker spots. It has neither the taste or smell of Castor Oil. To the taste it is a little sweetish, but not unpleasant. Thus endeth what I have to say of the *Ricinus Communis*. *Holt's Prairie, Perry Co., Ill.*, 1849.

Hints for October.—Those who wish to sow wheat after corn should do it early. Cut up your corn, and remove it entirely from the field—or adopt the plan suggested in our October number for 1847.

Potatoes and other root crops should be dug and properly secured before freezing weather sets in. If dug early, before the fall rains, and kept dry, potatoes will be much better for table use, and comparatively free from rot. Most garden vegetables should be secured, during the month.

Winter apples should be gathered before any severe frost. Those intended for long keeping, or marketing, ought to be carefully *hand-picked*, or with a fruit gatherer. If you make cider, put a pint of mustard seed into each barrel, (or pulverized charcoal, in a cotton bag, as recommended in our last number.) The mustard improves the cider greatly; it fines beautifully, and will not become hard.

Select your seed corn, if not already done; and save other seeds, such a cucumber, melon, lettuce, &c.

Hogs intended for fattening should now be shut up, and their feed increased. They will fatten twice as fast in warm as in cold weather—so hurry up the materials for pork during this month and November. Give them good shelter and dry beds.

Do up your fall plowing for spring crops at once, where you have no June or other foul grasses; but if these pests, or the wire worms are in your soil, don't plow until late—just before freezing up. (See reasons for this advice in Farmer for October, 1847.) On all soils that require and will bear it, put in the plow beam deep, and bring up the riches of the subsoil.

N. Y. State Agricultural Society.

PREMIUMS AWARDED AT THE N. Y. STATE FAIR, Held at Syracuse, September, 1849.

CATTLE—Short Horns.

Bulls over 3 years old.—Best, J. M. Sherwood, Auburn, "3d Duke of Cambridge," $25,00; 2, Thomas Bell, Westchester, 15; 3, S. P. Chapman, Clockville, 5.

Bulls 2 years old.—Best, William Fuller, Skeneateles, 20; 2, A. G. Percy, Wayne Co., 10; 3, J. B. Burnet, Syracuse, 5.

Bulls 1 year old.—Best, L. G. Morris, Westchester, 15; 2, S. P. Chapman, 10.

Bull Calves.—Best, L. G. Morris, 10; 2 J. M. Sherwood, Trans and 3.

Cows over 3 years old.—Best, S. P. Chapman, "Charlotte," 25; 2, L. G. Morris, 15; 3, J. M. Sherwood, 5.

Heifers 2 years old.—Best, F. Rotch, Butternuts, 20; 2, L. F. Allen, Black Rock, 10; 3, F. Rotch, 5.

Heifers 1 year old.—Best, Ambrose Stevens, New York, 15; 2, J. M. Sherwood, 10; 3, S. P. Chapman, 5.

Heifer Calves.—Best L. F. Allen, 10; 2, J. M. Sherwood, Trans. and 3.

Devons.

Bulls over 3 years old.—Best, R. H. Van Rensselaer, Otsego Co., 25; R. M. Remington, Cayuga, 15; J. Blakesly, Westchester, 5.

Bulls 2 years old.—Best, D. S. Earll, Salina, 20; 2, H. N. Washbon, Otsego, 10.

Bulls 1 year old.—Best. H. N. Washbon, 15; 2, David C. Howe, Cayuga, 10.

Bull Calves.—Best, E. P. Beck, Wyoming, 10; 2, H. N. Washbon, Trans and 3.

Cows over 3 years old.—Ambrose Stevens, $25; 2, H. N. Washbon, 15; 3, E. P. Beck, 5.

Heifers 2 years old.—Best, L. F. Allen, $20; 2, E. P. Beck, 10; 3, do. 5.

Heifers 1 year old.—Best, H. N. Washbon, $15; 2, E. P. Beck, 10; 3, R. H. Van Rensselaer, 5.

Heifer Calves.—Best, H. N. Washbon $10; 2, A. Stevens, Trans and 3.

Herefords.

Bulls 2 years old.—Best, Allen Ayrault, Geneseo, $20; 2, W. H. Sotham, Black Rock, 10.

Bull Calves.—Best, W. H. Sotham, $10; 2, Allen Ayrault, Trans and 3.

Cows over 3 years old.—Best. Wm. H. Sotham, $25; 2, Allen Ayrault, 15; 3, L. F. Allen, 5.

Heifers 2 years old.—W. H. Sotham, $20; 2, Allen Ayrault, 10.

Heifers 1 year old.—2d best, W. H. Sotham, $10; 3, L. F. Allen, 5.

Heifer Calves.—Best L. F. Allen, $10; 2, W. H. Sotham, Trans and 3.

Ayreshires.

Bulls over 3 years old.—Best, E. P. Prentice, Mt. Hope, $25; 2, L. G. Morris, 15.

Bull Calves.—Best E. P. Prentice, $10.

Cows over 3 years old.—Best, E. P. Prentice, $25; 2, R. Rome, Mt. Morris, 15.

Two years old Heifers.—Best, E. P. Prentice, $20.

One year old Heifers,—Best, E. P. Prentice, $15; 2, R. Rome, 10; 3, L. G. Morris, 5.

Heifer Calf.—Best, E. P. Prentice, $10.

Grade and Native Cattle.

Cows over three years old.—Best, D. S. Earl, $20; 2. S. P. Chapman, 12; 3, L. G. Morris, 4.

Heifers two years old.—Best Chauncey C. Cook, Oneida, $15; 2, David S. Earl, 10; 3, L. S. Bundy, Otsego Co., 3.

Heifers 1 year old.—Best, E. Sheldon, Cayuga co., 10; 2, P. B. Williams, Onondaga co., 8; 3, R. M. Remington, 3.

Heifer Calves,—Best, C. Merriman, Madison co., 3; 2, S. C. Parker, Trans.

Working Oxen.

Best team of 20 yoke, (Cortland co.) J. Barber and others, $50; Best single yoke of Oxen, E. Sheldon, 25; 2, do. J. Bryden, Oneida co., 15; 3, do. Hiram Cleft, Onondaga, Trans and 5; Disc. Best Trained Cattle, J. B. R. Church, Vernon, Sil. Medal.

Steers 3 years old.—Best single yoke, H. H. Eastman, Marshall, 10; 2, E. Sheldon, 8; 3, L. S. Bundy, Trans and 3.

Steers 2 years old.—Best yoke, B. H. Stroeter, Wayne co.

$10; 2, do. L. S. Bundy, 8; 3, do. H. Sheldon, Cayuga co. Trans and 3.

Steers 1 year old.—Best, James H. Sherill, New Hartford, $8; 2, H. Sheldon, 5; 3, J. Muir, Sen. Madison co. Trans and 3; Boys' training steers, D. Maine, De Ruyter, Madison co., Sil. Medal.

FAT CATTLE.

Best pair of fat exen over four years old, L. Doty, Wyoming co., weight 5,244, $25; 2, E. Sheldon, weight 4,850, 15; 3, Asa Nowlen, Liv. co. weight 5,236, 10. A pair of cattle belonging to Clement Leach, Madison co. were the heaviest on the ground, weighing 5,400 lbs., but were not sufficiently fattened. They are entitled to special commendation.

Best single ox over four years old, Edmund Munson, Cayuga Co., weight. 2,512, $15; 2, H. Sheldon, weight 3,146, 10.

Best fat cow over 4 yrs old, Clement Leach, weight 2,066, $15; 2, Robert Rome, weight 1,726, 10; 3, do. weight 1,942, 6.

Best pair of fat steers under 4 years, R. Rome, weight 4,398, $15.

Best single heifer, J. Barber; weight 1,486, $10.

Grass fed.—Best pair of fat oxen over four years old, E. P. Beck, weight 3,464, $20; 2, Israel Boles, Cortland co., weight 3,398, 12. Best steer under four years, E. Sheldon, weight 1,560, $8; 2, John Reeves, Lysander, weight 1,884, 3; 3, J. R. Burnett, Syracuse, Trans. Best cow over 4 years old, R. Allen, Syracuse, $10.

FAT SHEEP.

Middle Wooled over two years.—Best, J. M. Sherwood, $5; 2, do. 3.

Under two years.—Best, Z. B. Wakeman, Herkimer, $5; 3, Thos. Terry, Mt. Morris, Morrell's Shepherd.

Long-Wooled over 2 years.—Best, John Reeves, $5; 2, do. 3; 3, do. Morrel's Shepherd. No. 202. a Long-Wooled Sheep, owned by James Bicknell, Erie co, entitled to special notice. Recommended for a premium.

HORSES—*For all Work.*

Best Stallion over 4 years old. Wm. Ferguson, Marshall, "Bay Kentucky Hunter," $20; 2, Nottingham & Allen, Palmyra, "Young Norman." 12; 3. Bay Horse, owner's name not ascertained. 8; 4. O. Howland, Owasco, "Sir Henry," Youatt.

Brood mares and foal.—Best. Reuben R. Burt. sorrell Mare and Colt. $20; 2. Edward Munson. Cayuga co., bay Mare and Colt. 12; 3. Anthony Decker. Skaneateles. chestnut Mare and Sorrell Colt. 8; 4. Wm. Prior, Elbridge. bay Mare and Colt. Youatt.

Draught Horses.—Best Stallion over 4 years. Nottingham & Allen, "Young Sampson." $20; 2. Cornelius Schoby. Springport, "Young Alfred." 12; 3. John D. Spinner. Herkimer, "Sir Henry Eclipse." 8; 4, J. S. Thompson. Camillus, "Young Sampson," Youatt.

Brood mare and foal.—2. David Wemple, Mohawk. 12; 4, J. H. Lamberson. Van Buren. Youatt.

Blood Horses.—Best Stallion over 4 years. W. W. Huff, Buffalo, "Lance." $20; 2. Dow, Clark & Earl, dark gray Stallion, 12; 3. Simon Schermerhorn, Rotterdam, "Young Waxy," 8; 4, Pardon Austin, Marlius, "Young Eclipse," Youatt.

The thorough bred horse "Consternation," owned by J. B. Burnet, Syracuse, to whom was awarded the first premium at Utica, in 1845, was shown, and the committee consider him one of the best horses which came under their observation.

(The horse "Midas," owned by Mr. George Parish, of Ogdensburgh, was exhibited without being entered; the committee would have awarded him the second premium, if properly entered.)

Three year old Stallions and Mares.—Best Stallion, A. Butler, Wolcott, "Young Mogadore, jr., $15; 2, E. Moore, Cherry Valley, 10; 3, H. S. Marsh, Syracuse, Youatt; 4, W. Norton, Wayne co., Trans.

Mares.—Best, Elias Thomas, Oswego co., $15. No others exhibited deserving of a premium.

Two year o'd Stallions and Mares.—Best, Frank Brown, Ridgway, $10; 2, R. O. Arthur, Ticonderoga, 5; 3, J. Van Hoesen, Augusta, Trans.

Mares.—Best, John J. Bushart. Fonda; $10; 2, N. R. Williams, Oneida co., 5; 3, J. N. Holmes, Hastings, Trans.

One year old Colts.—Best Stallion, J. Muier, sen., Hamilton $5; 2 J. Hansenfrats, Youatt; 3, Nathan Souls, Clay, Trans.

Mares.—Best, N. B. Van Slyke, Sennett, $5; 2, S. A. Gilbert, Hamilton, Youatt.

Matched Horses.—Best pair, Harvey Gould, (bay Horses,) Orleans co., dip. and $15; 2, Thomas S. Clark, (bays,) Orleans co., 10; 3, Amos Lewis, (bay browns,) Tompkins co., 6; 4, H. Otis, Jordan, $5.

Geldings.—Best Gelding, dapple gray, owned by Arden Merrill, Rome, to whom the first premium was awarded at Saratoga, in 1847, and a certificate is now given pursuant to rules of society.

1st Prem., H. L. Barker, Clinton, dip. and $10; 2, S. S. Vaughn, Jackson, Mich., 8; 3, John Legg, Skaneateles, 6; 4, Nelson Boomer, Jefferson co., 4; Disc. to John B. Miller, Utica, for his bay horse. Vol. Trans; Wm. H. Sanders, Clyde, Wayne co., sorrell Colt, do; W. C. Chapman, Aurelius, gray horse, do.; H. Eaton, Syracuse, gray horse, do; all of these last being excellent horses, and worthy of the notice of the Society.

SHEEP.—*Long Wooled.*

Best Buck over 2 years, Geo. Swalls, Sodus, $10; 2, Lewis P. Allen, 8; 3, Charles N. Hudson, Onandaga county, 5. Best Buck under two years, Thos. Terry, Mt. Morris, $10; 2, W. Bathbone, Springfield, 8; 3, Charles N. Hudson, Onondaga co., 5.

Best pen five ewes over 2 years, Thos. Terry, $10; 2, W. Rathbone, 8 Best pen five Ewes under 2 years, Geo. Swalls, $10.

Best pen five Buck Lambs, Jas. Bicknell, Aurora, $8; 2, Thos. Terry, Morrell's Shepherd and 3.

Best pen five Ewe Lambs, Charles N Hudson, $8

Middle Wooled.—Best Buck over 2 years, Z B. Wakeman, Herkimer, $10; 2, J. M. Sherwood, Auburn, 8; 3, L. F. Allen, 5.

Best Buck under two years, J. M Sherwood, $10; 2, Wm Robson, Westmorelend, 8; 3, Z. B. Wakeman, 5.

Best pen five Ewes over 2 years, Wm. Robson, $10; 2, Z. B. Wakeman, $8; 3 J. M. Shrwood, 5.

Best pen 5 ewes, Z B Wakeman, $10; 2d. E. R Dix, Vernon, 5.

Best pen five Buck Lambs, Z. B. Wakeman, $5; 2, W. Robson, Morrell's Shepherd and 3.

Best pen five Ewe Lambs, Z. B. Wakeman, $8, 2, Wm. Robson, Morrell's Shepherd and 3.

Merinoes.—Best Buck over 2 years old. N. M. Dart. Harpersfield, $10; 2. Joseph Blakesley, North Salem, 8 3, J.M.Sherwood. 5.

Best Buck under 2 years J. D. Patterson, Westfield, $10; 2, D. S. Curtis, Canaan, 8; 3, J. M. Sherwood, 5.

Best pen five Ewes over 2 years, J. M. Sherwood, $10; 2, N. M. Dart, 8; 3, Randall & Milliman, Clay, 5.

Best pen five Ewes under 2 years, J. Blakesley, $10.

Saxons.—Best Buck over 2 years. S. H Church. Vernon, $10; 2, S. B. Crocker, do., 8; 3, S. H. Church.

Best Buck under 2 years, S. B. Crocker, $10; 2. R. J. Ransom, Hoosick, 8; 3, Joseph Haswell, do., 5.

Best pen five Ewes over 2 years, S. H. Church, $10; 2, S. B. Crocker, 8; 3, Randall & Milliman, 5.

Best pen five Ewes under 2 years, R. J. Ransom, $10; 2, S. H. Church, 8; 3 Randall & Milliman, 5.

Shepherd's Dogs.—Best Shepherd's Dog, "Cammer," M. Bingham Vt., 5.

Samples of Wool from the late importations of Messrs. Catlin & Smith, of Wolcottville, Conn., (from the flock of Baron de Spark) were exhibited, and for *evenness* of *fiber*, *fineness* and *thinness* of *fleece*, they are beautiful indeed.

The Connecticut Premium of $100 for the best 25 Merino Ewes and the best 25 full blood Merino Lambs less than one year of age, was awarded to A. L. Bingham, of Cornwall, Vermont.

SWINE.

Second best boar over 2 years old. H. N. Washburn, Otsego. $5. 2d best 1 year old. David Preston. Elbridge, 5. Best boar over 1 year old, James Gilkerson, Homer, 10; 2. B. Williams, Onondaga. 2d best 6 months old. C. R. Nichols, Bethany, 3 2d best breeding sow over 1 year old, F. Thayer, Darien, 5; 2, do over 5 months, F. Thayer. 3. Best lot of pigs, Rufus Cossett, Onondaga, 10; 2, H. N. Washburn, 5.

FOREIGN STOCK—*Cattle.*

Herford.—Best Bull. L. G. Bingham, Vermont, dip. and $25.

Devon.—Best Bull, R. C. Gapper, Thorn Hill, C. W., dip. and 25. Best one year old Bull, M. Bingham, Vermont, dip. and 10. Best Bull Calf, Devon,) R. C. Gapper, dip. and 5 Best Cow over 3 years old.(Sally) L. G. Bingham, dip and 25; 2, (Cherry) L. G. Bingham, dip and 15.

Horses.—Best Stallion over 4 years old, (Morgan Grey Hawk,) L. D. Harlow, Hartland, Vt., dip. and $20; 2, I. Ashford, Toronto, C. W., dip and 15; 3. Calvin Blodgett, (maj. Gifford,) Chelsea, Vt., dip and 8; 4, G. F. Wheeler, Middlebury, Vt., (Morgan Horse 5 years old) Youatt.

SHEEP.

Long Wooled.—Best Buck, Geo. Miller, Markham. C W, dip and $10. Best pen five 5 Buck Lambs, Geo Miller, dip, 5. Best pen 5 Ewe Lambs, G Miller, dip and 5.

Merinos.—Best Buck, E Robinson, Addison co. Vt. dip and $10. Best pen 5 Ewes, M Bingham and E Robinson, dip and 10, to be divided between them. For 2 very fine Ewes, L G Bingham, dip.

PREMIUMS OPEN TO ALL.

Horses.—Grey Stallion, "Young Norman," owned by Nottingham & Allen, diploma. Best Breed Mare, chestnut, "Morgan Mare," C H Blodgett, diploma.

SHEEP—*Long Wooled.*—Best Long Wooled Buck, Geo Miller, dip. Best pen 5 Buck Lambs, Geo Miller, dip.

POULTRY.

Best lot Poland Fowls, S J Cheesebro, Syracuse, $3.
Best large fowls, J I Bushart, Fonda, 3.
Best Muscovy Ducks, C N Hudson, Onondaga, 3.
Best pair Large Geese, "Bremen," D Cossett, Onondaga, 3.
Best Java Bantums, E E Platt, Albany, 3.

FARM IMPLEMENTS.

Best Farm Wagon, D W Seely, Carlisle, Sco Co, Diploma and $6.
do Harrow, A H Fitch, Liv Co, dip and $3.
do Corn Cultivator, Jeremiah Fusk, Lysander, dip and $3.
do Fanning Mill, Jacob Clapper, Fort Plain, dip and $5.
do Corn Stalk Cutters, J C Rich, Penfield, Mon Co, dip & $5.
do Straw Cutters, J C Rich, dip and $3.
do Corn and Cob Crusher for power, H. L Emery, dip & $5.
do Clover Machine, Rapalje & Briggs, Rochester, dip & $5.
do Ox Cart, Paris Barber, Homer, Cort Co., dip and $3.

[*To be concluded next month.*]

FARMING LANDS IN EASTERN VIRGINIA.

BY S. S. GRISCOM, OF PETERSBURG, VA.

Eds. Genesee Farmer:—A few days ago I received two numbers of the Genesee Farmer, one of which contained an article from Fairfax, Va., describing that section of country, and inviting northern farmers to settle there—with an editorial note, asking further information from different sections of the South and West.

As I have spent several years in making myself acquainted with this section of country, I gladly avail myself of so good an opportunity as your valuable paper presents, to give to your readers some information respecting this section of Virginia, which I believe to to be the finest portion of the United States, for agriculturists.

If any one will examine any good map of Virginia, he will see at once that no section of the globe of the same extent, is so remarkably furnished with bold, navigable rivers. The Potomac the Rappahannock, the York, and the James, with their numerous branches, penetrate the State, from the Ocean into the mountains, and their head waters interlock with those tributary to the Mississippi. The tide flows in them from one hundred to near three hundred miles from the Ocean, and they are navigable for the largest ships, all this distance. Above the tide, on the main streams, and their thousands of tributaries, they furnish immense water power for all sorts of machinery. The soil generally, is not surpassed for natural fertility—and having seen all the eastern and northern States, I am of the opinion that there is less poor soil, and land incapable of profitable improvement in eastern Virginia, than in any State north of it. The middle portion contains lime, gypsum coal, salt, iron, &c., &c., in the greatest abundance—while the whole tide water section is underlaid with immense deposites of fossil marine shells and animals, furnishing what is called calcarious marl, rich in lime, containing sometimes as much as 90 per cent of that essential element in grain producing soil.

My attention has been chiefly confined to the tide water region, because of the great facilities for shipment of produce to all the markets of the world, at the smallest possible cost. For altho' canals and railroads are indespensable to render the products of the Farmer and Manufacturer of the interior of any value, they can never compete with the great highways which nature has made. There are in this State, now unoccupied, excellent lands, and unopened mineral and manufacturing resourses, sufficient for the maintenance of a population greater than that of the whole U. States at the present time. And I am well convinced, there is no portion of the earth which offers fairer inducements to farmers and manufacturers, than this. I think it can easily be shown, that farming here is more profitable, and pays a better interest upon capital employed in it, than in any other section of our country. This assertion does not rest upon conjecture, but can be readily proven from unqnestionable data, which I can easily produce from farmers who keep accurate accounts of all their operations, and who while pursuing acknowledged imperfect systems, and have only *begun* to pursue an improving system at all, make from 12 to 22 per cent and upwards, upon the capital invested, after deducting every expense. One of the most intelligent and respectable farmers in the State, who makes no assertion without good data, told me that he could purchase lands in the marl region, and make one hundred per cent, in perpetuity, upon the capital invested, and I think his experience warranted the assertion. I am aware that all this loooks like painting high colors, but I assure you, I believe it to be sober truth, and invite intelligent farmers from the northern States, to come and see for themselves. A thorough examination will at least grátify them, and I can promise to any intelligent, respectable men, who desire to be informed, a reception by the farmers of Virginia, as cordial as they can desire.

After much careful examination, I have chosen the country bordering on the James and York rivers, as offering the strongest inducements to those who desire to settle in this State—for here the soil is superior to that of many of the more northern counties, and much of it equal in natural fertility, and susceptibility of high productiveness, to the very best in the world. Almost every where marl is superabundant. On the rivers lime, for those who prefer it, is delivered on the farms, at 6¼ cents per bushel. The winters are so mild, that there is scarcely a week when the plows are stopped by frost. Cattle and sheep live well with very little provender, and I have no where seen finer cattle and sheep than here. The country is healthy, and as the land is more opened and limed, it will be improved in this respect. It is also well watered, abounding in fine springs and streams of pure water. Figs, pomegranites, peaches, apricots, melons and apples grow in great perfection, and ripen a month or six weeks earlier than in your country. Much cotton and tobacco are raised in the southen counties, but most farmers, who are beginning to improve, are confining their attention to wheat and corn.

The facilities for the shipment of grain from this region are equal to any, and superior to most. There is scarcely a farm in this region more than 3 or 4 miles from good navigation, and thousands that have good landings on them. A friend of mine is just now shipping his crop of red wheat, about 12,000 bushels, for which he gets 104 cts. per bushel, cash, at his wharf. Excellent lands in this region, most eligibly situated, and some of them on the rivers of surpassing beauty—often with good buildings and abundance of the finest timber, which can be shipped to the nort hern cities at great profit—can be purchased at prices ranging from $5 to $50 per acre. In many instances the the timber judiciously managed, may be made to pay for the land two or three times over. In the lower counties, the finest oysters, fish, wild geese, ducks, turkeys, deer and other game abound.

Those persons who are afraid to live on tide water, may find lands from 10 to 30 miles west of this town, of excellent quality for grazing or agricultural products generally, in a very healthy country and often with spacious buildings and fine improvements, at prices ranging from $1,50 to $10 per acre.

I make it a part of my business, and it will give me pleasure to impart to any who desire it, more particular information respecting any section or tract with which I am acquainted. The owners have placed a very large number of farms in my care for sale, many of which are very desirable and cheap. I desire those who are seeking new homes, to come and take time to examine the whole region thoroughly—promising them all the aid in my power.—Saml. S. Griscom.—*Petersburg, Va., 9 mo. 12th*, 1849.

LANDS IN WESTERN N. Y. AND VA.—COMPARATIVE VALUE OF RICH AND POOR SOILS.

BY CALEDONIA.

Messrs. Editors:—In perusing the Genesee Farmer, I noticed a communication from a correspondent of Fairfax Co., Va., in which he solicited the farmers of Western New York to emigrate to Virginia instead of going West. The principal reasons assigned, are on the account of its easy access to good markets, the low price of land, and the soil being easily cultivated.

The reasons are among those of these first magnitude to the farmer: but it matters very little how remote from market lands are located, that will not produce more than than the cultivator requires for consumption. Hence a good and convenient market is of no benefit or utility, unless the lands will produce a surplus beyond what the agriculturist wishes to consume; but on the other hand a good and convenient market is of the greatest importance to those who have productive lands, which not only enhances their intrinsic value, but renders them always saleable. It does not augment the price of unproductive land, by its being situated adjacent to navigable waters or a good market, for agricultural purposes; but those lands which are easily wrought, and on which good crops of all kinds grow in abundance, the facilities to market make very desirable; they are eagerly sought for, and will always command good prices.

There are some men whose means are comparatively small, who think it injudicious and hazardous to purchase our best and most productiue farms and pay a price corresponding to their productions, location, &c. They will buy third rate land because it may be purchased for $20 or $30 per acre, and will not involve them in debt but a few hundred dollars; whereas, if they had bought the first quality of land, every foot of which is, or easily may be, under a high state of cultivation, it would make the debt as many thousands. Now from which farm would a judicious farmer extinguish the debt for his land first, from the low priced or the other? The $20 farm in the first place has an inferior soil by nature, and by tillage it has become less productive than at first; therefore, in consequence of the uncertainty or failure of a crop, the owner fails to pay even the hundred dollar payment which is due—and in the deficiency of the crop, arising from the inferiority and unproductiveness of the soil, it deranges his pecuniary affairs, from which he seldom or ever recovers. The farm which is highly cultivated, can be relied upon; nothing to do but put in the crops, harvest and market them; no expense in fetching the land up, or in making repairs; every dollar obtained goes towards the extinguishment of the debt;—often has the case been where two installments have been paid of one thousand dollars each, from the productions of one year, which will extinguish the debt of several thousand dollars in a few years, and his farm growing better.

In order to substantiate the above, I will state, that I am acquainted with a farmer in this town who purchased a choice wheat farm some two years since. The farm contains 96 acres of improved land, and from 8 to 15 acres of timber. The purchase money amounted to $13,100. There was 85 acres of wheat on the ground, which he harvested, the sale of which amounted to $2,593 73—reserving 105 bushels for seed, and some 65 bushels for bread. The wheat was sold for 10s. 4d. per bushel. The barley sale was $90 25, and the wool and fat sheep amounted to $77 37; which constituted all the sales for that year. The whole aggregate amounts to $2,761 35. He kept an accurate account of all expenses for the year, and they amounted to $523 87; this includes farm labor of all kinds, mechanics' bills, and family expenses, which leaves a net revenue from the farm of $2,237 48. And in addition to this he had 70 acres of wheat growing for the next season, and the cost of putting this in is included in the above expenses. The next season he harvested 15 acres less of wheat, but obtained a better yield. From the 70 acres he sold 2,006 bushels, sowed 117½ bushels, and kept for bread 67 bushels. The wheat was sold for 9s. 1d. per bushel; 450½ bushels barley at 4s.; 100 bushels corn at 4s.; and 332 lbs. wool at 31 cents per pound. The sales for the second year were $2,634 92, and the expenses amounted to $492 83—leaving a balance in favor of the farm of $2,142 09. In the item of expenses there is included the putting in of 80 acres of wheat which he has harvested the present season.

With this array of facts, which would be the most advisable for a cultivator of the soil, with only a few thousand dollars, to lay it out for a farm in this healthy and productive country, where the markets are convenient and good, or to go to Virginia and purchase those cheap lands which are so impoverished, the productions of which at present but a little more than pay for cultivation? Some four or five crops in this country will pay $55 or $65 per acre, and pay the expense of growing the same. I think I am justified in making the assertion that it will require some four or five years to put those worn out lands in Virginia under a tolerable state of cultivation, and at the same time it is attended with much labor and expense. *Caledonia, Liv. Co., N. Y., Aug.*, 1849.

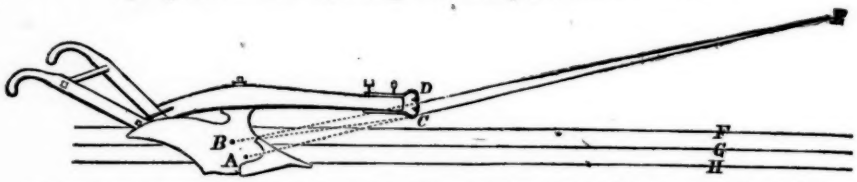
WIRE FENCES.—GROWING THORNS FOR HEDGES

Messrs. Editors:—I see in the August number of the Genesee Farmer a communication of F. R. Miller of Pa., recommending the setting of trees for the support of Wire Fences. I have had a similar idea, and would suggest, for that purpose, the use of the Chesnut, as the wire will not corrode within that tree; and it may be continued through the whole line of the fence, by merely boring a hole of the requisite size through the trees successively. Whether Chesnut posts will answer the same purpose I am not certain, as I do not know whether the dry wood has the same preservative effects on iron with the living tree.

I take the liberty of inquiring, if it be in your power to inform me, what is the contractive effect on wire of the cold of winter over the temperature of a hot sun in summer: that is, how much a piece of wire which is a rod long in the summer heat, will contract in the cold of winter? and whether the inconvenience attending the changes of temperature, may not be obviated by spiral steel-wire springs, at stated distances, and at what cost?

H. R., of Seneca County, in recommending our native thorn for hedges, speaks of its ease of propagation "by seed." I have planted a great many of the berries or apples, but have never yet had one to spring from them. What is H. R.'s system by which he causes them to vegetate. L.—*Tompkins Co., N. Y., Aug.*, 1849.

The Plow.—Its History and Improvements. No. 3.



PRINCIPLES INVOLVED IN THE CONSTRUCTION AND OPERATION OF THE PLOW.

BY HORACE L. EMERY, OF ALBANY, N. Y.

Friend Moore:—As I some months since commenced a series of notices concerning the Plow, and promised to continue them, I now forward you a few cuts, with my own explanations of the power and draft, as connected with the Plow.

Having before written concerning its form and construction, I will now continue, with the remark, that probably few subjects are less correctly understood, not only by plow makers but by the plowmen themselves, (who of all others are most interested,) for as much depends upon the proper attachment of the power as upon the proper construction of the Plow, to cause it to do its work properly, and with the least expenditure of power of man and team.

From the complex construction of plows, as also the manner in which circumstances oblige us to apply the motive power, many different theories and misconceptions have arisen as to the proper mode of application of the draft to effect the desired operation of the plow.

To better illustrate the subject, a reference to the above drawing, with the explanations will be of service to all concerned.

1. All plows, when in operation, meet with resistance, caused by friction in the soil, and which is increased by the weight of the furrow-slice, as well as the tenacity of the soil or sward.

2. All plows, when in operation, have a right line of draft, (often miscalled center draft,) which may be defined by drawing a direct line from the fixed point of the motive power, (as for instance, the ring of the hames in the harness of the horse, or the ring of the yoke, with oxen,) to the center point, or place of the resistance of the work upon the mould-board of the plow,—or as may be seen in cut, from E to A or E to B.

Were it not for considerations of convenience, a chain firmly attached to the body of the plow at A or B, in the direction of this line of draft to E, would answer all purposes better perhaps than the wood beam, as now constructed.

Now, as the chain, if placed as above described, would obstruct the proper working of the plow, we are compelled to apply the power indirectly to produce the desired effect—the power of draft being the means by which the end is accomplished; it is by the use of the present framework of the beam (connected firmly and unyieldingly to the body of the plow,) that the desired end and object is attained. Therefore, when the beam is constructed properly, the effect produced by the application of the force at the point of the beam at C or D, is precisely the same as if attached to the chain, firmly fixed to the mould-board at A or B, as before described. This much for the line of draft.

The point or center of resistance upon the plow, is on the forward part of the mould-board, and a little lower than the surface of the ground being plowed, and about midway of the width of the furrow slice. This center of resistance is varied by circumstances, as for instance, let the plow in above figure be set into the furrow to the depth as represented by the two lines G and H, the center would be near the point on the mould-board marked A. In this case, the draft is represented by the line A to E, and to secure the proper working of the plow, and preserve this line it becomes important that the force be applied to the beam at the point C. But should the plow be set deeper in the ground, and as shown by the lines F H, the center of resistance would be higher up the mould-board, or at B, thereby changing the line of draft from A E to B E, and requiring the power to be applied to the beam at the point D, instead of C, as before.

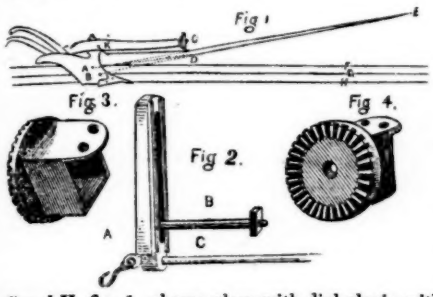
From the foregoing, it will be readily seen, that the line of draft is changed as often as the center of resistance is changed by deep or shoal, as also wide or narrow furrows; or as often as the point of draft of the team is changed by tall or short horses or oxen, long or short traces, or long or short yokes. In order, therefore, to preserve the line of draft, it is necessary to have an adjustable clevis at the end of the beam, that the plowman may regulate the same to accommodate the circumstances of the case.

Should the plow incline to raise at the point, and require an exertion of the plowman to keep it down, it follows that the power is applied too low in the clevis to accommodate the line of draft; as for instance, the center of resistance being at B in the cut, and the attachment to the clevis being at C, the power being at E, the plow would tend to rise at the point C until it intersects the line B E. This would probably throw the plow out of the ground, or lessen the depth of its work. By the simple arrangement of the clevis, and attaching the power to the beam at the point D, the steady, easy and uniform motion of the plow is obtained and preserved, and the same rule for regulating or applying the draft holds equally true in all cases, as width, depth, &c.

If a plow is properly stocked, the clevis giving the variations to the extent of the square of the end of the beam, is sufficient for all practical purposes; but as it often happens that from want of skill in the construction of the plow, or the condition of the land, or when two or three horses abreast are used, or when it is desired to have the team work upon the solid ground in plowing bogs, &c., it is all important that a clevis be so constructed that it may be susceptible of sufficiently wide range of variations.

Many different kinds of attachments have been invented—some simple and good, while others are heavy, cumbrous, and inconvenient. The best now before the public is that called the *Dial Clevis*, with the draft rod, known as J. M. C. Armsby's Patent

of December, 1845. It is strong, instantly adjusted to any degree of nicety, and capable of a greater variation than any other kind, without the least endangering the strength of itself or the other parts of the plow. Below are cuts showing the parts of this detached, as also their application to the plow, with its use, as before explained, in obtaining and preserving the line of draft.



C and K, fig. 1, shows plow with dial clevis with rod attached, and position of plow in operation, line of draft, &c., &c.

A, fig. 2. The guide or movable plate which is confined across the end of the beam.

B, fig. 2. The joint bolt and nut which confines the guide to the end of the beam.

C, fig. 2. A section of the draft-rod passing through the guide, and to which the power is applied.

Figs. 3 and 4. The cast iron cap fitting the end of the beam, and through which the joint bolt passes, and to which the guard is confined by means of the bolt, and cogs or teeth on it, fitting into ribs upon the guide.

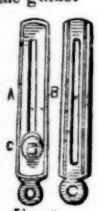


Fig 5.

A, fig. 5. Shows the front view of guide, and head of bolt confining it.

B, fig. 5. The back view of guide with splints or ribs which fit the cogs on the cap, as seen in fig. 4.

This clevis is light as any ordinary clevis, and costs but fifty cents more than a common wrought iron one.

The rod is made of the best wrought iron and extends back underneath the beam any distance, at the pleasure of the maker. As shown in fig. 1, it is attached at K, or near the coulter bolt.

At an early day I intend to take up the subject of the public trials of plows, as generally conducted, and show the advantages to be derived therefrom, as also to point out some of the errors and their cause, by which the public are often misled—also, their remedies. H. L. E.—*Albany, N. Y., Aug.*, 1849.

The Harvest in Canada is favorably spoken of by the Toronto Globe, which says:—The fall wheat harvest in this neighborhood is now almost gathered, and we are happy to say that the yield is most abundant—greater than for many years past. We hear of thirty, forty, and even fifty bushels to the acre on many farms.

Onondaga Salt.—The activity in the salt manufacture has not been surpassed in any former year. The quantity manufactured since 1st January, is given by a Syracuse paper at 1,171,136.16 bushels, or an increase of 401,488.38 over the previous year.

IMPORTANT DISCOVERY ABOUT PEAT.

A discovery has been made in Ireland which is likely to be more important than the discovery of gold in California to America. It is a discovery which, if it be truly represented, must open in the United Kingdom mines of wealth worth a thousand Californias—mines of wealth having these extraordinary properties, that all the cost of exploring them will be clear gain to the people, while the place from which the treasure is to be withdrawn will be enriched by its removal.

Lord Ashley's statement of the amount of valuable materials into which 100 tons of peat was convertible—100 tons of peat which cost £8, and the labor of converting it about £8 more, contained:

	Lbs.	*Value.*
Carbon of ammonia,	2,602	£32 10 2
Soda,	2,118	8 16 6
Vinegar,	600	7 10 0
Naptha, gallons,	30	7 10 0
Candles,	600	17 10 0
Camphene Oil,	600	5 0 0
Common Oil,	800	3 6 8
Gas,		8 0 0
Ashes,		1 13 4
		£91 16 8

Mr. Owen, he said, had tried this experiment not merely on one hundred tons, but on thousands of tons of peat during the whole of the last twelve months. He had expended his capital on it and had received his remuneration, and was ready to stake his character and fortune on the issue. He (Lord Ashley) wished to add, that after the peat was cleared away the soil beneath was found fruitful beyond all description, because it was absolutely saturated with ammonia; and consequently, not only would the country be enriched by the conversion of the peat into valuable materials, but the soil itself would afterwards be found in a far more cultivatable condition.

The introduction of steam navigation, railroads, agricultural chemistry, the application of the electric fluid (itself unknown 200 years ago) to uses unimagined 20 years ago, and in many other new applications of physical power, afford pregnant proof of the inexhaustible resources of material nature.

If the above be true, says the New York Express, the discovery will be of immense advantage to the United States. There is already a handsome business done in Massachusetts and elsewhere in New England—and for aught we know in other parts of the country—in the cutting and drying of peat for purposes of fuel. New value will at once be given to this enterprise, should the above prove true.—*Ex.*

Mediterranean Wheat.—A correspondent of the Winchester (Va.) Republican states that in that part of Virginia the Mediterranean wheat escaped rust better than any other variety. The wheat crop of Washington county, Pa., it is said, was not more than half an average yield this year, in consequence of rust. A good deal of the Mediterranean was sown the past season in that county, and, notwithstanding the damage done to the other varieties, the Washington Reporter says that "all of this," so far as it can learn, "has turned out well."

Cheap Mode of Fattening Hogs—Allow them to run at large, and teach them to break into your neighbor's corn field every night.

CIRCULAR FROM THE PATENT OFFICE.

We are pleased to receive the following circular, issued by the Commisioner of Patents. The enquiries are directed to the most important subjects, and are so framed as to elicit the principal facts relating to each. If properly responded to, as we trust they will be, they will bring out a mass of valuable information in regard to the agricultural resources of the different sections of our country :—

THE COMMISSIONER OF PATENTS, *in execution of acts of Congress, desires to procure information from Planters, Farmers and others on the following, and any other points that may occur to you, connected with agriculture:*

WHEAT.—Your experience as to varieties, difference in weight, and of time in ripening; enemies and diseases, soil and manures best adapted to.

OATS.—What varieties have you tried and with what results, particularly as to the time of ripening; with their estimated value as compared with corn as food; is the cultivation of the oat becoming more or less popular, and for what reason?

RYE.—Have you knowledge of any new and valuable variety; to what use is it applied; have crops diminished of late years, without any apparently corresponding diminution in the fertility of the soil, and to what influence is it supposed to be attributed?

BARLEY.—Have any new varieties been tried, and with what results; to what uses is this grain applied in your State; if not cultivated, is it forbidden by your soil and climate?

MAIZE, (INDIAN CORN.)—What varieties most esteemed and for what reasons; what the difference in time of ripening; is it liable to change of character and climate, and other influences, and your observations on that point; give the estimated value of the husk as compared with the blade, and of both as compared with good hay, weight for weight; what is the value of green corn for soiling cattle, and especially for producing milk; your experience as to feeding grain, whole or ground, cooked or raw?

RICE.—Variety cultivated; describe any new and valuable process for its cultivation or preparation for market.

(NOTE.)—As to all these grains, please state the cost of production and usual weight, and the probable average per acre and actual aggregate product, if known, of each in your State; whether the average product per acre has increased or diminished; whether the weight per bushel of the various grains is fixed by law in your State; and what weight is prescribed for each.

HAY.—State the comparative value as food for stock, of clover, timothy and mixed hay; the grass seeds preferred in laying down meadows; the average yield per acre; describe any new process in curing; have meadows been irrigated in your State and with what effect?

PEAS.—For what purpose cultivated in your State; for food or for improving the soil: estimated value as food for stock, compared with Indian corn; the most esteemed variety for field culture; average product per acre; value of haulm or vines compared with other fodder; average price per bushel in the last year.

ROOT CROPS.—Irish and sweet potatoes, turneps, carrots, beets, mangel-wurtzel, artichoke, and other varieties; comparative value; cost of production: weight per bushel; and the average per acre, and aggregate produce for your State.

COTTON.—Average yield per acre and per hand in your State; aggregate yield of the whole State for 1849; describe new varieties and processes of cultivation; manures best adapted to; cost per pound or bale, of production; freight, charges, commissions &c. paid by the planter.

SUGAR.—Whether of cane or maple; the product per acre; describe any new process of cultivation or manufacture; variety of cane cultivated; its enemies and diseases; cost of making sugar; freight, charges, &c., paid by the planter.

HEMP.—On this head give any information that you may deem valuable and new as to varieties, processes of cultivation and preparation for market; soil and manures best adapted to; cost of production.

BUTTER.—Quantity made in your State; average annual produce per cow; are cellars or spring houses preferred?

CHEESE.—Same questions.

HORSES AND MULES.—Number raised in your State; average value of each; comparative value for farming purposes; where is your market for them?

Number of Horned Cattle in your State; average value of at three years old; where driven to market; cost of keep per head per year; which of the improved races is preferred?

SHEEP HUSBANDRY.—What the prevailing races; what the condition of this branch of industry: amount of wool clipped in the year, and average weight of fleece of different races; cost of keeping sheep through the year per head; where your markets; what your system of selling; have you wool depots, and are they found advantageous for wool grower and manufacturer; what number killed by dogs in your State?

HOGS.—Average weight at a given age; average weight consumed per head; proportion of live to nett weight, and cost of production per pound.

RAIN.—Time and degree of highest and lowest range of thermometer, and the mean temperature of the year; also, inches of rain water in each month, and aggregate for the year.

LABOR.—Cost of, with and without boarding, and cost of boarding.

TAR AND TURPENTINE.—Quantity and value of, produced per hand.

PLASTER and other Fertilizers.

LIME.—If used as an improver in your State, how much is thought to be best per acre, and how often applied?

ORCHARDS: *fruits, transplanting of trees, &c.*—Information on these and kindred matters will be of universal interest.

On the cultivation of the VINE, on GRAPES, and AMERICAN WINES, communications are particularly solicited.

P. S. Please answer this as soon as convenient after you procure the information, and before the 1st of December; and, in the mean time please name any one to whom this circular may be sent in the hope of fuller informrtion. If not room on the circular, please reply on a separate paper, referring distinctly to the queries.

THOMAS EWBANK.
United States Patent Office, Commissioner.
Washington, July, 1849.

ATTEND your County Agricultural Fair, and take such animals and articles as will add interest and value to the exhibition.

DEATH OF MR. BATES, AND SALE OF HIS HERD.

Eds. Gen. Farmer:—Allow me herewith to furnish you for publication, in the Genesee Farmer, an extract of a letter I received from England, by the arrival of a recent steamer, addressed to me by Robert Bell, Esq., dated Kirkleavington, August 22, 1849. He remarks:

"It is my painful duty, to announce to you, that our late much esteemed friend, Thomas Bates, Esq., is no more. His spirit returned to God who gave it, on the 26th July last, after an illness of six weeks. It may be said of him, in his death, his country has met a great loss; more particularly its agricultural community, as he was a practical agriculturist of a discriminating mind and great experience. He more particularly excelled in the science of breeding, especially in the breeding of short-horn cattle. He early in life evinced a lively interest in this department, and by nature he seemed highly qualified not only to become conspicuous, but successful, in this branch of his profession; and the result of his sixty or seventy years of daily practical application, has, beyond the question of a doubt, placed him in the front ranks, of the most successful breeders England has ever produced.

"The wide spread reputation and standing of his Duchess herd of short horns is well known and appreciated. The public will now have an opportunity to judge of their merits, as they will be offered for sale, at auction, probably next spring or summer. The time of sale is not yet fixed, but as soon as it is, I will take the earliest opportunity of informing you. I intend offering part of my herd, and that of my brother at the same time—probably the number offered will amount to 150 head."

Having myself, sold in your vicinity, as well as in other parts of the United States and in Canada, many cattle possessing the blood of Mr. Bates' herd, I presume the intelligence contained in Mr. Bell's letter will be highly appreciated by these gentlemen: hence allow me to ask its insertion in the Genesee Farmer. Geo. Vail.—*Troy, N. Y., Sept.*, 1849.

Too Hot for the Apples.—That very hot week in June was a little too strong for many of the apples in our vicinity. One hundred and one degrees of Fahrenheit in the shade, is a little too much free caloric for fruit of that description.

It fairly *cooked* some of the *outsiders*, and hence in many orchards we have noticed a great thinning out of the fruit, which had set abundantly, and which promised to give an abundant crop. The crop must, of course, be not a very great one. Friend Cole says we never have a great crop in "*odd years.*" It is *odd* to have such hot weather in June as we have had this year, and it is *odd* to have baked apples so soon after the blossoming. This is an *odd* year to all intents and purposes, and the *odds* are against the apples.—*Maine Farmer.*

Munificent Beqtest.—The late Mr. Theodore Lyman has bequeathed a legacy of $50,000 to the Reform School, at Westborough, Mass., of which he was the founder. He has also given $10,000 to the Boston Farm School, of which he has been an active officer for several years, and $10,000 to the Massachusetts Horticultural Society, in whose labors he always took a deep interest.

AMERICAN BUTTER IN ENGLAND.

Speaking of American Butter, the London Commercial Journal has the following remarks:

"At a public sale of American butter at Liverpool, it fetched for best sorts, (one hundred and twelve pounds,) eighty-four shillings; second, seventy-two to seventy-four shillings, duty paid; while inferior only sold at forty-three shillings in bond, of which the parcel chiefly consisted. The quantity arrived at the London market shows the same results, the principal part being sold for grease purposes. The American makers of butter are very far behind the Irish, English or Dutch; from the first operation to the last, all seems to be done without system or care; the same materials would, if managed by experienced hands, fetch in this market twenty-five shillings or thirty shillings more money; there is no attention paid to the making, salting, putting down or packing."

Disagreeable to our national pride and self esteem as the above statements are, we copy them nevertheless, for the purpose of correcting the defects in American butter. It gives us pain to know that so many citizens of this free and enlightened country "are behind the Irish, English and Dutch in making butter"—that where provisions are so scarce and dear as in England, none will eat common "American butter," but it goes, alas, for *soap grease!* For the credit of our rural population, we invite all our readers to aid us in putting an extinguisher on the manufacture and exportation of mean and nearly worthless butter. The production of so much "grease" of this kind, is alike unprofitable to the farmer and disreputable to the United States. The evil is in truth as unnecessary as it is disgraceful. It costs but a trifle more to make a firkin of clean, sweet, pure butter than one of rancid, curdy, filthy grease, fit only for the soap boiler. The former will bring a fair, remunerating price, (and it costs no more to transport it to Liverpool,) while the latter will hardly pay freight, insurance and commissions.

All the first rate butter and cheese which our enterprising dairymen can send abroad will be bought and consumed with avidity. They are great luxuries as well as valuable and wholesome articles of food.

Rule for Constructing Chimneys.—A very erroneous practice prevails, among chimney builders, of contracting the passage for the smoke at the lower part near the fire-place. "This," says Treadgold, "is like contracting the aperture of a pipe which supplies a jet." Chimneys, to draw well, should be contracted at the top. The rule for ascertaining the required degree of contraction is as follows:—

Let 17 times the length of the grate, in inches, be divided by the square root of the height of the chimney, in feet, and the quotient will be the area in inches, of the section of the aperture at the top of the chimney. For example, a grate 15 inches in length, with a chimney 36 feet high, to which the contracting top is required—17 multiplied by 15 gives 255, which number divided by 6, the square root of 36, gives 42½ inches for the area of the top.

Shoeing Horses.—At a meeting of the Royal Agricultural Society of England, some time since, Professor Sewel remarked, that he frequently found old horses shod with a layer of leather, forming an artificial sole between the hoof and the shoe, recovering from severe affections, causing injury to the hoof—such for instance, as contraction, brittleness, and cracks, or even diseases of the foot itself, as thrushes, corns, cankers, etc., and permanently regain their original elasticity and firmness.

Domestic Economy.

LARD LAMPS.—IMPROVEMENT IN MAKING.

BY A FARMER'S WIFE.

Messrs. Editors:—Can you inform me where the lard lamps are manufactured? (I mean britannia lamps (*a*)—those made of tin are liable to leak if set too near the fire, or from turning in hot grease.) My husband purchased one of a pedlar some five years ago, merely for the purpose of testing its value. We were very much pleased with it, but have never been able to purchase another.

I have experimented a little with my lamp, and find it consumes less grease than a common mould candle, while it gives more light than two. It burns with a clear steady light, and if the grease is clean, and the wick properly trimmed, it will require no more attention during the evening. Tallow, or any kind of house grease properly clarified, will burn equally as well as lard. I wish also to suggest a little improvement in their construction. Instead of removing the top when the lamp is to be filled, which with the utmost care is apt to disarrange the wick, there should be a tube on one side, rising as high as the top, to be secured with a screw cover.

I have heard some object to the lard lamp on account of the trouble of fitting and putting in wicks; but I have never heard these objections from persons who were ever obliged to make candles, clean candle sticks, or find their own lights. With clean grease a wick will last a month. I once burned one every evening for seven weeks, and I consider it less trouble to fill a lamp, (with a lamp filler, and no person who owns a lamp should be without one,) than to take care of a pair of candlesticks, and snuff candles. Candles are necessary when a light is required only for a short time, as in the morning; but if a light is wanted during the night, by picking down the wick of the lamp it will consume but a small quantity of grease, and require no snuffing. They should be manufactured from the best of britannia, as that article requires very little polishing to keep it looking as well as new. *Onondaga Hill, N. Y., Aug.*, 1849.

(*a*) Mr. J. Kedzie, 11 State-st., Rochester, has a few Britannia Lard Lamps for sale. They are (or were formerly) manufactured at Auburn, N. Y.

How to Render Cloth, Silk, &c., Water-Proof.—Take one pound, each, of common alum (sulphate of alumica,) and sugar of lead (acetate of lead,) and dissolve them in six quarts of boiling water, well mixed by stirring. When cold, the top portion of the mixture should be poured off for use, as the sediment consists of sulphates of lead, potash, &c. Any article of dress, no matter how slight the fabric, if well saturated with this liquid, and allowed to dry slowly, will bear the action of boiling water, and not permit it to pass through it.

To Preserve Clothes.—As clothes, when laid up for a time, acquire an unpleasant odor, which requires considerable exposure to the atmospheric air to remove, it can be prevented by laying lumps of recently made charcoal between the folds of garments; and even when the odor is already fixed, the charcoal will absorb it.

To Clean Knives.—Charcoal, ground to powder, is one of the best things ever used for this purpose.

Veterinary Department.

Warts, Wens and Tumors on Animals.—Mix tar and salt, and apply them; continue the practice, renewing the application frequently, until a cure is effected.

As a remedy for wens, some cast the animal and cut out the wen, then fill the cavity with powdered rosin and salt, well mixed; and carefully bring the skin back to its place and sew it up. Or wash the wen often, and for a long time, with warm vinegar, saturated with common salt. We have known large wens cured by warm salt water alone. Or put a hair seton through those that are not sitfasts, or a wolf on the jaw, when they appear to be ripe, and wash them daily in soft soap.

For warts, cut them open, and apply blue vitriol, *(sulphate of copper,)* in powder. A physician was induced to try this, (and it was attended with excellent success,) from learning that a boy had many warts cured on his hands from sorting brass nails, from the influence of the copper in the brass.—Neither the cutting or the application is painful. Or apply to warts raw grated carrots, mixed with salt. Warts are sometimes cured by the application of spirits of turpentine, or lunar caustic.—*Cole's Veterinarian.*

To Cure a Biting Horse.—Biting is a bad and dangerous habit. It is said that the bite of a horse that is not mad will sometimes produce madness. The following is regarded as an effectual remedy; but it is to cure a savage habit. A horse would better burn himself than bite people repeatedly. Roast or bake a piece of meat, and present it hot as he attempts to bite. Be cautious lest he bite a piece of *live* flesh instead of *hot* meat.—*Ib.*

Gestation.—The time that animals go with young is called their period of gestation; and this, as is well known, differs materially among the several kinds domesticated by man. Thus, the period of gestation in the mare is about 330 days; that of the cow 280 days; that of the sheep 154 days; and that of the hog 114 days. A most extensive series of experiments on the period of gestation has been made at the governmental farms of France, and on the farm of Lord Spencer in England. From these it appears that in the case of the mare and the cow, very great deviations from the average time occurred, amounting in the extreme to nearly two months. In the case of the sheep and swine, the deviation was less, but still considerable. The times stated above are the average of the whole; and will probably be found as nearly correct a guide for the breeder of these animals as the circumstances will admit.—*Gaylord.*

The Time for Taking Sheep from the Pastures.—This must depend on the state of the weather and food. Severe frosts destroy much of the nutriment in the grasses, and they soon after cease to afford adequate nourishment. Long exposure to cold storms, with such food to sustain them, will rapidly reduce their condition. The only safe rule is to transfer them to their winter quarters the first day they cease to thrive abroad.—*Allen's Dom. Animals.*

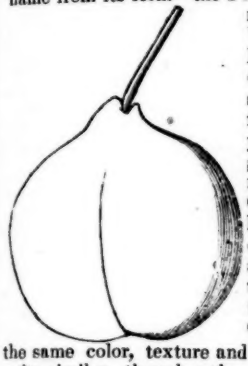
For Costiveness or loss of appetite, sulpher is a good remedy, given in a light mess, for swine.

HORTICULTURAL DEPARTMENT.

EDITED BY P. BARRY.

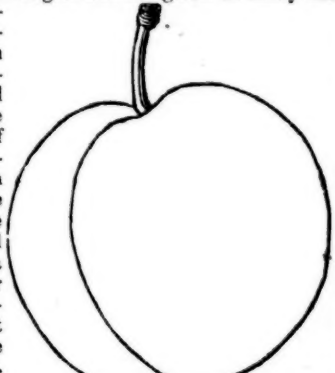
DESCRIPTION OF TWO NEW AND FINE PLUMS

MAMELONEE, *(Sagaret.)* This is a curious plum, raised by Mr. SAGERET, near Paris. It takes its name from its form—the French word *mamelon* signifying nipple or peak.



We imported it from France with the *Reine Claude de Bavay*, and some other new varieties, four years ago. This year a three year old graft bore a fine crop that ripened with the Green Gage, about the 20th of last August. With the exception of the remarkable nipple at the base of the stalk, it would pass for a good sized Green Gage. It is of precisely the same color, texture and quality, and the tree is quite similar, though rather more vigorous, and the shoots are more gray. Its unique, and altogether distinct form, with its excellent qualities, make it a very desirable variety. It is very productive.

REINE CLAUDE DE BAVAY. This rare and excellent variety was originated not many years ago, by the late Major ESPERIN, of Malines, in Belgium, an enthusiastic pomologist who has given us many fine winter pears—not yet generally known in this country.—He considered this plum one of the finest of all his productions, and from what we have seen of it we think it well worthy of a place with our finest sorts.—This is the first year we have had it in fruit, and we are not sure but ours is the first fruit grown in this country.



The old Green Gage and Coe's Golden Drop have both been sent to England for this variety, according to the statements of Mr. Rivers; but we have been fortunate in obtaining the genuine article from the beginning. Our fruit were produced on a graft set 3 years ago on one of the top branches of another tree. It bore about 30 well-grown specimens; besides many that were stung with the curculio and dropped. On vigorous trees we suppose it will attain a larger size. Medium specimens measured 5½ inches in circumference; roundish, very slightly oval, resembles the Washington, with a well marked broad suture extending round one side. Stalk about half an inch long, in a pretty deep cavity. Skin pale greenish yellow, occasionally like the Green Gage, tinted with red when well exposed to the sun; thinly coated with whitish bloom. Flesh yellowish green, firm, juicy, rich and sweet; adheres to the stone. Ripens from the 15th to the last of September—later than most of the fine plums, and hence very valuable. Shoots moderately stout and smooth; leaves oval, glossy, and of medium size, not unlike those of the Yellow Gage. Tree exceedingly productive.

Mr. RIVERS says that he visited the parent tree in October, 1847, and on the 12th of that month ate of the fruit produced on a dwarf standard, preserved under muslin, perfectly fresh and unshrivelled. He said the parent tree then was about 15 years old, and was covered with fine fruit; they were indeed more numerous than the leaves.

STATE FAIR AND POMOLOGICAL CONVENTION.

ENGAGEMENTS at home prevented us from reaching Syracuse until the last day of the Fair, and then we found ourselves in fact "a day after the Fair"—for Floral Hall was being swept out for the great ball; and we were deprived of a sight, even, of the fruits and flowers that had been collected there from various parts of our great State. The season, however, has been exceedingly unfavorable in all parts of the country, and this rendered the show less varied and extensive than it otherwise would have been. Still we are informed that it was very good, and great credit is due to the Committee who constructed and arranged the beautiful tent. We must refer our readers to the reports of the Committee for a detail of the exhibition.

The Pomological Convention assembled in the City Hall. There was a fair display of fruits, considering the season, and a numerous attendance of nurserymen and fruit-growers from various sections. Dr. J. A. KENNICOT, of Illinois, was chosen President, and B. HODGE, of Buffalo, and F. R. ELLIOTT, of Cleveland, Ohio, Secretaries—CHAS. DOWNING, of Newburg, S. B. PARSONS, of Long Island, and P. BARRY, of Rochester, a Committee to bring fruits before the Convention for discussion. During all the forenoon, an interesting discussion was sustained on such fruits as had not been passed upon by the Convention of last year. Among those who participated in the discussion were C. M. Hovey, of Boston, Chas. Downing of Newburgh, S. B. Parsons of Long Island, B. Hodge of Buffalo, Jas. Dougull of Canada, J. W. P. Allen of Oswego, A. Saul of Newburgh, David Thomas of Aurora, &c. We shall refer to the discussion at a future time. Among gentlemen of distinction from other States, we noticed C. M. Hovey, Esq. of Boston, Prof Mapes of New Jersey, Hon. Adam Ferguson of Canada, M. B. Bateham, Esq. of Ohio, besides others from other States.

In the afternoon the discussion on frnit was continued, and Dr. Wendell of Albany, introduced a resolution, That a committee be appointed to attend the approaching sitting of the National Congress of Fruit Growers at New York, with a view to merging the two societies or bodies into one. We regret that we have not a copy of the resolution. It was well received and unanimously adopted. Reports from several State Committees were handed in, but not read.

After raising a fund to defray the expenses of the Convention and the publication of its proceedings, the meeting adjourned in the best spirit. The session was short, but pleasant, profitable anp harmonious, as all such assemblages ought to be.

THE AMERICAN FRUIT CULTURIST—Containing directions for the Propagation and Culture of Fruit Trees in the Nursery, Orchard and Garden; with descriptions of the principal American and Foreign varieties cultivated in the United States. By JOHN J. THOMAS. Illustrated with 300 accurate figures. Published by DERBY, MILLER & Co., Auburn, N. Y. 12 mo.—410 pages.

Mr. THOMAS' original little volume, "*The Fruit Culturist,*" published some three years ago, was well received and widely circulated among the farmers and fruit growers, and has no doubt aided in diffusing much valuable information. The moment we first saw it we predicted its success and usefulness, because it was an unpretending, cheap little treatise, giving plain directions for the culture and management of fruit trees, with familiar descriptions of a few select varieties—just what was wanted by thousands of the country people, who had little or no experience in tree culture, and who have no relish for large volumes, high prices, or complicated scientific or technical details.

We hope this enlarged edition will be equally successful. It has cost Mr. THOMAS a vast amount of care and labor, for which we hope he will be fully compensated; but we confess that it disappoints us, and we apprehend will disappoint others. It is easy, we know, to find fault with, and suggest improvements, upon what may have cost long and weary days, weeks and months of thought and labor; and we reflect on this work of our friend with a great deal of reluctaace, and only because we are compelled to utter our honest convictions. We hope the book will appear to the judgment of others more favorable than to our own. The great error which Mr. THOMAS has committed, and which we consider, has greatly injured his book, is the attempt to do too much—to compress a great deal of matter in a very small space. If he had confined himself to his original plan, and enlarged upon it, treating only of cultivation in all its branches, in full and explicit details, and of all the truly fine varieties *worthy of cultivation* in the garden or orchard—giving full and particular accounts of them *in all respects*—then he would have given us a book of great value, without a doubt—such a book as we have not at present. This was what we have expected of him. But instead of confining himself to this department, he has attempted to epitomise the whole subject of pomology, and make his book not only a manual for the mere gardener or orchardist, but a book of reference for the pomologist. This no man could do satisfactorily in so small a volume, nor should it be attempted.

To show what an amount of superfluous and almost useless matter there is in the volume, we will refer to the matter itself. Sixty pages are devoted to the descriptions of 250 varieties of apples—only 12 of these are distinguished by CAPITALS, as having been admitted as eminently worthy of cultivation in many different parts of the country; 50 others are distingnished by SMALL CAPITALS, as being next in value and quality; while all the other 200 sorts are superceded or unworthy of cultivation. Sixty-seven pages are devoted to the mere description of 250 varieties of pears, only 11 of which are designated by capitals, as above, and 22 in small capitals, while the other 200 are stated to be unworthy of cultivation, except in the collection of the pomologist.

Upwards of 100 varieties of plums are described, only 5 in large capitals, and 19 in small—leaving three-fourths of the whole number among the indifferent or rejected sorts. Now we do not think that the mass of cultivators will feel much interested in these 200 apples, 200 pears, 75 plums, &c., &c., all superceded, or unworthy of cultivation in their grounds. Would they not have thanked him to have left them out entirely, or given them simply in a list, and to have given more complete and full accounts of those that he did honor with large and small caps? For instance, the Swaar apple, which he says is "esteemed by many as the finest winter table apple." Instead of pointing out its particular excellencies and defects, and stating, as far as may be known, where, and under what circumstances it had, and had not succeeded, he very vaguely says, "not successful in all localities—fruit apt to be scabby on old over-loaded trees." A couple of pages might very profitably have been devoted to such a fruit as this. The cultivator ought to have been told how to remedy this production of "scabby fruit." The other leading fruits are passed over in the same unsatisfactory manner. The descriptions in Downing's Fruits and Fruit Trees are far more full and complete, and the particular excellencies and defects much more satisfactorily treated of—so that even the practical man must still refer to this book.

Mr. Thomas has, with a view to correctness, introduced certain descriptive terms that will not, for some time, be easily or well understood, except by those who have had some scientific training. Some of his descriptions will read harsh, we think; for instance, the *Beurre Knox Pear* is described as "large, oblong-obovate, obconic, acute." The *Gendesheim* pear is "large, often only medium, obtuse-pyriform, rather irregular, approaching obtuse-obconic." The *Bonchretien Fondante* is "roundish, slightly oblong, rarely short, obovate, obtuse." Such strings of scientific terms will appear as jargon to most people, and in our opinion will be more embarrassing than advantageous. Accuracy and precision is of great moment, to be sure, but we like to see every thing in its place, and we think these "obconics" have found their way into the wrong book.

Full sized outlines of a number of the best fruits are given, but these do not, as in Downing's, accompany the text, nor is reference even made to them in it, so that they are of comparative little value for ready use. Comparative forms of a number of apples and pears are given, in a scale one half the diameter; but unless to convey an idea of form, these are of no use, as no one who is not possessed of some mathematical information and instruments can work out the natural size. We consider the whole outline matter as a great loss, or at least a great misapplication of labor.

As a work of reference for the nurseryman or pomologist, we consider the book still more defective than for the cultivator, as there is a lamentable want of that detail of synonyms, history, local value, &c. Mr. Downing's descriptions are here much more valuable; not perhaps in the correct description of the fruits—Mr. Thomas' descriptions are exceedingly precise—but in the historical and other important detail. For instance, take the Golden Beurre of Bilboa Pear. Mr. Downing tell us that it was imported 18 years ago from Bilboa, Spain, by Mr. Hooper, of Marblehead, Mass., and that its European name is unknown. Mr. Thomas says, "a native of Bilboa, Spain." By the way it took us a long time to find this variety in Mr. Thomas' index, as he has it, "Bilboa, Golden Beurre of" –instead of "Golden Beurre," or "Beurre Golden," which we naturally

looked for. *Berberries*, *Mulberries* and *Nuts*, that are hardly fruits, very commonly cultivated, are left out entirely, as well as *Figs*, *Pomegranates*, *Olives*, *Oranges*, &c., more or less cultivated in some parts of the United States.

Such are the principal objections we have to the plan of the work, and which compel us to think that Mr. Thomas, with a good intention to make a book that would be valuable and acceptable to all, has made one that will be of very partial utility to any.

As regards the *matter* of the book, we have not been able to give it a very close examination. The first part, of 100 pages, treating of "General principles and practices," is very good—better we think, than the same part of any other book of the kind we have. It contains the latest experiences of the author, and cultivators generally, gleaned from the best periodicals of the day, arranged in a compact and covenient manner. This part of the book will be worth much more to the cultivator than all the rest, and will not be too dear at the price of the book, for those who are without a guide in those matters. We have noticed a few errors that it would not be proper to pass by. On page 28, on "the production of new varieties," the word "inoculated" is frequently used, instead of fertilized or impregnated; "inoculated', is never used in speaking of the application of the pollen of one flower to the stigma of another, but is used generally as synonomous with budding. This is a trifling error but worthy of correction.

The classification of the different varieties strikes us as very good. It is the same as that adopted in some European treatises. APPLES are separated into three divisions—*Summer*, *Autumn* and *Winter;* each division into two classes, *sweet* and *acid;* each class into two sections, color *striped with red*, and color *not striped*. This last division of color we have not met that we remember in any other book, and although not objectionable, will be of litttle service. We think the distinctions would have read more correctly in this way, "color with more or less red" and "color without red"—because some apples are wholly red or washed with red and not "striped," and those "not striped" might be wholly of any color, like Black Detroit, or Red Astracan. PEARS are arranged in three divisions, *Summer*, *Autumn and Winter*. Each division into three classes, "Distinct Pyriform," "Obscure Pyriform," and "Roudish or Oblate;" each class, into three sections, large, medium, and small. In a scientific work these would be very well; but for practical uses, the divisions, as season of ripening and uses, table or cooking, would be more simple and valuable. The cooking varieties should certainly be classed separately, as they have now become quite numerous and distinct, and the distinction is observed by all cultivators.

The article on pruning is quite meagre and faulty, particularly that "to promote fruitfulness," and "pyramidal trees." At the present moment these two branches of pruning are among the most interesting subjects connected with tree culture, and Mr. Thomas has said but very little about them, and that little is neither explicit nor correct. We could extract an article from a late number of Hovey's Magazine worth ten times as much. Indeed Mr. Thomas is evidently in the dark on this subject. No man, however much he may have read or thought on the subject, or how intelligent he may otherwise be, can communicate intelligible or reliable information on pruning, until he has used his knife for a long time, and observed well and extensively the effect of every operation. The pruning of pyramidial trees, and pruning to promote fruitfulness, require care, skill and caution, and if directions are given they should be fully and explicitly stated. We shall have more to say on this subject at another time.

In speaking of the culture of dwarf pears, page 196, it is tated that the orange quince had proved the best for stock. Now this is a great error. A similar statement was made by Mr. Downing some two or three years ago, in the Horticulturist, and the confidence placed in that Journal induced the general belief that this was so; consequently a great many nurserymen commenced raising seedlings of the orange quince to work the pear, and in most cases that we know of it has proved a failure. A neighbor of ours, an excellent nurseryman, tried it, and had to pull up and throw away his young trees at two years old. He would not impose on his customers by selling them, and he is now supplying his nursery with the French stock. This is an error that will lead to serious consequences we apprehend, and we are astonished that Mr. Thomas' great caution should have led him to hazard such an opinion.

There are many little matters through the book we should like to notice. For instance the *Carnation Cherry* is described as "yellowish white, mottled and marbled with fine orange red; leaves resembling those of a heart cherry." When mature the Carnation is light red, marbled with deeper red, and the leaves are distinctly of the Duke or Morello classes, though large.

There is an indefiniteness about the terms used to denote the seasons of the ripening that will not be found convenient to everybody. Instead of saying "wheat harvest," "autumn," "mid autumn," "early," "late," "rather late," "season medium," &c. we would greatly prefer to have the months or parts of months designated. It would take some people a considerable length of time to figure up the exact date of "wheat harvest," "mid autumn," or "medium season."

In the latter end of the book we find a chapter on the pronunciation of foreign names, or rather a half way attempt at anglicising them. Beurre is here made to rhyme with hurry—thus, "burry." This is quite new indeed. We should be much pleased to have all foreign names anglicised, if it could be done properly; but until we can have an English name in reality, let us have the *true* French pronunciation, at least in books.

We trust that what we have said will deter no one from purchasing this work; for, although it is not what we expected, nor what, in our humble opinion, it ought to be, it is a book of great value, and we hope will find its way into the hands of every professional and amateur cultivator in the country. It costs but a dollar and there is many a dollar's worth of useful matter in it, not in other similar works. This much we feel it our duty to say.

TRANSPLANTING.—Autumn transplanting is to be preferred for all hardy trees and shrubs, except when soil may be wet as in the very northern extremities of the United States and Canada.

Trees planted carefully—properly, as soon as removal is practicable, will be nearly a year ahead of those not planted till the following spring.

THE BAILEY (OR EDGERLY) SWEET APPLE.

BY F. K. PHOENIX, OF WISCONSIN.

Mr. Editor:—You published not longsince an outline and description of a fine sweet apple from Perry, Wyoming Co., N. Y., which you called the "Bailey Sweet"—stating on, "good authority," that it originated with C. P. Bailey, Esq. of that place. Having been acquainted with that fruit for the past 18 years, and esteeming it very highly, I have propagated it extensively in my nursery, and not being able to identify it with any book variety, I have felt very desirous of ascertaining its origin. Last fall when at the east, I stopped some time at Perry, my native place, and while there took much pains to trace out the source of this fruit, but could only learn the following facts:

They first appeared in the orchard of T. Edgerly, Esq. and his father in that place, from scions set 25 or 30 years since by some traveling grafters. Where they came from, or where they obtained that fruit, was alike unknown to my informant, Mr. E. Edgerly, a brother of T. Edgerly. Hence you will observe that it did not origiuate with Mr. Bailey—who, however, afterwards came in possession of the original orchard, and being a zelaous amateur horticulturist, and withal very liberal, disseminated it widely—and to whom therefore, the public is much indebted, as also to the Messrs. Pattersons of the same town. I have called it the Edgerly Sweet as first appearing with that family, and as having been so called to a considerable extent in that vicinity—though known by both names. Having given you the facts you can judge for yourself which is the correct name.

I fully acquiesce in the character given it in your description. It is by odds the finest sweet apple I ever saw of any season. The trees are productive and in the nursery very hardy and thrifty, and generally upright, though slender, and on poor soils sometimes straggling. Wood remarkably dark. F. K. P.—*Delavan Nursery, Wis., Sept.*, 1849.

This apple has been described under the name of "Baily Sweet," and considerably disseminated since under that name. That name was adopted because in most general use. We do not think that any other could be adopted now, with propriety.—Ed.

Notes on Cherries.—We consider cherries that ripen during the last of July and first of August very valuable. Some people think that because the cherry season is short, it is not important to select varieties with regard to their season of ripening; but they are greatly mistaken. If we are to have a dozen cherry trees, instead of selecting only two or three popular sorts, such as *Black Tartarian, Yellow Spanish, Black Eagle, Knight's Early Black, Elton,* &c.—all first rate to be sure, but ripening about the same time, or varying not more than a week—we should make some such selection as the following: *Bauman's May,* or *Early Purple Guigne,* both very early, (say 10th to 15th of June in this region,) and about equal in quality, *May Duke, Knight's Early Black, Black Tartarian, Elton, Napoleon Bigarreau, Belle de Choisy, Sparhawk's Honey, Downer's Late Red, Elkhorn, Belle Magnifique.* Here we have a dozen trees that will supply fruit from the tenth of June (in some seasons earlier,) until the middle of August; and if we would add one or two late Morellos, we might extend the cherry season nearly three months.

PEAR TREE BLIGHT.

Mr. Barry:—Having witnessed the effects of Blight in pear trees, and the almost certain destruction of them in our immediate region, I have taken no small pains to enquire of growers of them in different localities near us what the cause was, and remedy, if any. Premising that the pear tree naturally is a lopg lived one, I have found that where they have been grown in land where the grass has been suffered to remain in heavy turf around them, in close, compact, heavy soil, little if any blight has been seen. This culture prevents a too rapid growth of the young and tender shoots, consequently the *hot* sun's rays does not check the circulation of the sap, to burn and blight them. I find many persons who say that trees of theirs, growing under these circumstances, rarely blight; while others, who dig round the roots and give them strict attention, only find disappointment in *blight.* I am satisfied that had I not spaded round a large tree this season, around which I found the earth had packed and grass well grown and matted, that I should not have lost it.

My advice is to plant the trees in good heavy soil and pack it round, even to stamping down, and then put leached ashes around them. Then we shall have slow growing, long lived and sure bearing pear trees. I should be glad to have some one or many give their experience in this matter, and tell the public through the Farmer, whether I am right or wrong in my conjectures. James H. Watts.—*Rochester, N. Y., August,* 1849.

Remarks.—We shall be glad to hear the experience of fruit growers on this point. The same view has very generally been taken of *blight.* A connection has been supposed to exist between rapid growth and blight, but from very extensive observation we are inclined to doubt it. We have seen old and slow growing trees, on hard and dry soil, just as much affected as rapid growers on a damp soil. One thing however is true, that it is more difficult to save a tree growing rapidly when it is attacked, on account of the more rapid circulation of the juices, and consequently the disease. As far as our observation has extended, there has been very little blight this season. Indeed we have seen none whatever in any of the nurseries here—nor in private gardens, except in cases where trees had been previously attacked. It is evidently disappearing.

Culture of the Plum.—"An old Digger," in the *Horticulturist,* says: "Plum trees like a moist soil. I have found that covering the ground four inches deep with old spent *tan-bark,* is a good way of preserving the moisture, and keeping the tree in health. I scatter fresh lime thickly over the surface of the tan every year, as soon as the green fruit begins to fall. This kills every curculio that attempts to enter the ground. The tan prevents the weeds from growing, keeps the roots cool, and insures me good crops of plums. I spread it as far as the roots extend, and it wants renewing, or adding to, once in three or four years."

Fruit Trees may be transplanted successfully, in this and most other sections, any time from the 1st of October until the ground is frozen. The trees should be well secured, and a few inches of manure or litter spread around the roots.

Editor's Table.

ACKNOWLEDGEMENTS.—We are indebted to M. B. BATEHAM, Esq. editor of the Ohio Cultivator, for a copy of the "Third Annual Report of the Board of Agriculture of the State of Ohio." It is a work of over 200 pages, and contains much valuable statistical matter relative to Ohio Agriculture, together with several well written essays on practical and scientific subjects. We shall endeavor to give, in future numbers, some extracts from its pages.——To DERBY, MILLER, & Co. for a copy of "The American Fruit Culturist," by J. J. THOMAS. See review of this work, page 242.——To the proprietors for a "Descriptive Catalogue of Garden Leeds cultivated at the Wethersfield (Conn.) Seed Garden, by COMSTOCK, TERRE, & Co."—containing much useful information on gardening, &c., &c.——To the proprietor for "Descriptive Catalogue of Fruit and Ornamental Trees, Shrubs and Plants, cultivated and for sale by DANIEL MILLER, Jr., at the Cumberland Nurseries, near Carlisle, Pa."——To the Secretary for the "Third Annual Report of the Mahoning Co. (Ohio) Agricultural Society"—containing the Address of JOHN M. EDWARDS, Esq., and other interesting matter.——To several unknown friends for pamphlets and papers embracing reports and proceedings of various Agricultural Societies, &c. &c.

OBITUARY.—It is with much regret that we announce the recent decease of several prominent and ardent friends and promoters of agricultural improvment—men who have accomplished much for the benefit of mankind and their country. Among others, we notice the death of HENRY COLMAN, Esq. author of "European Agriculture and Rural Economy," and formerly editor of this journal; ELIAS PHINNEY, Esq. of Lexington, Mass.; Dr. H. GATES, of St. Louis, Mo., senior editor of the Valley Farmer, and formerly editor of the Iowa Farmers' Advocate; Col. EDMUND KIRBY, of Brownsville, Jefferson Co., N. Y.; Hon. E. MACK, of Ithica, N. Y.; and THEODORE LYMAN, of Boston. We regret that lack of space prevents a more particular notice in our present number.

AGRICULTURAL FAIRS.—So far as we have ascertained the Agricultural Fairs held in the month of September, have been unusually well attended. We have only received full reports from two or three counties. The Livingston County Show, held at Geneseo on the 4th and 5th, is described as being all that could be expected from the farmers and friends of improvement in that noble agricultural district. The exhibition of stock was highly creditable—the best, probably, ever witnessed at any County Fair in the State.

The Monroe Co. Fair is being held to-day, (Sept. 26.) Though only stock, implements, &c., are exhibited on the first day, the number of people in attendance is much greater than at any previous Fair of the Society. The cattle, horses, sheep and swine are better and more numerous than we anticipated. The display of implements and machines is good, as usual. Among the latter we notice that our enterprising friend EMERY has his Railroad Horse Power and Thresher in operation and working to a charm.

CREDIT.—The wholesale manner in which the Farmer is copied from, and no credit given, by several agricultural and other leading and influential journals, induces us to again protest against the neglect or unjustness of those who thus appropriate the labor and property of others. We observe in the Working Farmer for August, an article on "Agricultural Education," by our able correspondent AGRICOLA, credited to the *Washington Republic*. As it originally appeared in the Farmer, we ask the usual credit—though we are glad that an article so able and important is receiving such extensive circulation. We have some twenty different journals now on our table, which contain articles originally published in the Farmer, (some of which cost us and our correspondents much time and labor) without the least acknowledgement. To promote the cause we are very glad to have our articles copied; but when editors who boast of their talents and enterprise make use of our humble lucubrations, to enhance the value and popularity of their respective journals, we respectfully submit whether they are not unacquainted with, or heedless of, the commands of the Decalogue.

THE LIST OF PREMITMS awarded at the State Fair in Syracuse, was received so late that we are unable to publish it all this month. We make room for a part of it, and will endeavor to give the remainder in our next.

AGRICULTURAL SHOWS.—Annual Fairs of State and County Agricultural Societies are to be held this month as follows:—

Chemung County,		Horse Heads,	Oct. 17 and 18.
Delaware	"	Delhi,	Oct. 3.
Genesee	"	Batavia,	Oct. 4 and 5.
Niagara	"	Lockport,	Oct. 16 and 17.
Onandaga	"	Syracuse,	Oct. 3, 4 and 5.
Seneca	"	Ovid,	Oct. 4 and 5.
Suffolk	"	Greenport,	Oct. 2.
Wyoming	"	Warsaw,	Oct. 2 and 3.
Yates	"	Penn Yan,	Oct. 5 and 6.
Maryland State,		Baltimore,	Oct. 10, 11, and 12.
Middlesex, Mass.		Concord,	Oct. 3.
Mahoning Co. Ohio,		Canfield,	Oct, 2 and 3.
Clinton	" "	Wilmington,	Oct. 17, 18 and 19.
Ross	" "	Chillicothe,	Oct. 5 and 6.
Licking	" "	Newark,	Oct. 3 and 4.
Delaware	" "	Delaware,	Oct. 2 and 3.

SEEDLINGS, for Sale at the Geneva Nursery.

PEAR, Plum, Cherry, Apple Quince, Mountain Ash, Horse Chesnut, Buckthorn, &c. SEEDLINGS and SEED of the above trees for sale at the Geneva Nursery.

Also, all kinds of Fruit and Ornamental Trees, Shrubbery, and Vines for sale.

Geneva, Ont. Co., N. Y. [10 3m*] W. G. VERPLANCK.

Nursery Fruit Trees for Sale.

THE undersigned has from fifteen to twenty thousand cultivated Fruit Trees, fit for transplanting into orchards and gardens, for sale on liberal terms. There are over one hundred of the choicest varieties of Apple, Pear, Peach, Cherry and Plum Trees, in his collection, that can be found in this country. All orders from a distance will receive prompt attention.

MOSES LONG, No. 29, Alexander street.

Rochester, N. Y., Oct. 1. [10-2m]

Seedlings for Sale.

THE Subscribers, proprietors of the Old Castle Nurseries Geneva, N. Y., have for sale

50,000	Quince	Seedlings,	15 to 20	inches	high,	$10 per thousand.
50,000	Cherry	do.	8 to 15	"	"	8 " "
40,000	Pear	do.	8 to 20	"	"	10 " "
20,000	Plum	do.	8 to 15	"	"	10 " "
20,000	Apple	do.	2 y'rs old	nice for grafting		$5 per 1,000.

They cultivate extensively, and have for sale the rare and approved varieties of Fruit and Ornamental Trees. Also, Buckthorn, Hawthorn, &c., for hedges.

All orders promptly attended to. Trees sent a distance well packed and delivered at the railroad depot.

T. C. MAXWELL.

Geneva, N. Y., Oct. 1, 1849. [10-2m]

To Nurserymen.

THE Subscriber offers for sale 20,000 Seedling Plum Stocks 2 years old, at $8 per thousand.

10,000 Seedling Plum Stocks, 1 year, at $5 per thousand.

10,000 Pear Stocks. Seedlings, 2 years old, transplanted and very fine, at $15 per thousand.

The above are in fine healthy condition. Orders per mail, (post paid) will receive prompt attention. Address

Rochester, N. Y. [10-1m] EDWARD DAGGE.

Notice—Seedlings For Sale.

60,000 Apple Seedlings, of three years growth, for sale by the Subscriber. Price $3 per thousand.

ELIAB YEOMANS.

Walworth, Wayne, Co. N. Y. [10-1t]

Removal to No. 21 Buffalo-st., Talman Block.

C. HENDRIX & SON,

WHOLESALE and Retail Dealers in Iron, Steel, Nails, Spikes, Shelf and Heavy Hardware House trimmings of all kinds, as cheap as the cheapest.

Rochester, Oct. 1, 1849. [10-3t]

E. BALDWIN,

ENGRAVER FROM NEW YORK CITY,

Having taken room No. 15, 3d story, Arcade Rochester, N. Y., lately occupied by John Miller, is prepared to execute all orders for

ENGRAVING,

With neatness and despatch, and respectfully solicits a share of public patronage.

Sons of Temperance, Odd-Fellows', and other seals engraved to order.

JUST PUBLISHED,

BY DERBY, MILLER AND CO., AUBURN,

THE AMERICAN FRUIT CULTURIST,

BY J. J THOMAS.

A GREATLY enlarged and improved edition of the Fruit Culturist, containing more than triple the matter of the former editions, having been wholly re-written, so as to embrace essentially

ALL THE VALUABLE INFORMATION

Known at the present time, relative to

FRUITS AND FRUIT CULTURE.

It contains more than

THREE HUNDRED ACCURATE ENGRAVINGS,

And will include condensed and full descriptions of all fruits of merit or celebrity cultivated or known in the country.

To prevent confusion in a numerous list of varieties, careful attention has for years been given to effect the clear and systematic arrangement adopted in this work; and further to enable the reader to know at a glance, the various grades of excellence, the quality is designated by the size of the type used for the name.

The numerous figures of fruits are

EXACT IMPRESSIONS

Of average specimens. The descriptions have been prepared in nearly every case, from the fruits themselves; and to distinguish fixed from accidental characters, careful comparison has been extensively made with specimens from several different states, and with the descriptions in the best American works on Fruits.

To determine the qualities as adapted to different regions, assistance has been largely furnished by a number of the most eminent pomologists of the Union.

The whole forming a handsome duodecimo volume, of over 400 pages, at the low price of One Dollar.

The work belongs to the author and is not traded. A liberal discount is made to Booksellers.

DERBY, MILLER & CO.,
Oct. 1., 1849. [10-3m] Publishers, Auburn, N. Y.

☞ The above work just received and for sale at the office of the Genesee Farmer. It can be sent by mail. Price $1.

Macedon Nursery.

THOMAS WRIGHT, successor to WILLIAM R. SMITH, (whose ill health compels him to relinquish the business,) has purchased the entire stock of this well known establishment, for which he has hitherto acted as Agent. The design of the original proprietor, "to furnish the community with the best varieties of fruits," will be constantly kept in view.

The stock of trees is now large, and will be sold at the Nursery at the following reduced prices, viz:

6,000 Apples, $16 per hundred; $18 when delivered.
1,000 Pears, $35 per hundred.
3,000 Cherries, $25 per hundred.
3,000 Peaches, rare kinds, $10 to $12 per hundred.
Apple, Pear, Wild Plum, Quince, &c., by the thousand.

Apricots, Nectarines, Plums, Filberts, Quinces, Chestnuts Walnuts, Strawberries, Grapes, &c., &c., at very moderate rates. A great variety of Ornamental Trees and Roses and other Plants are offered at 50 per cent discount from the usual prices. Immediate attention will be given to all orders accompanied by cash or satisfactory reference.

Macedon, Wayne Co., 9th mo., 1149. [10-1t]

Valuable Farms in Eastern Virginia.

NO. 38. 230 Acres in Prince George, 8 miles south of Petersburg, in the Marl region—50 acres cleared. 75 acres of timber in original growth, with much excellent heart Pine. Price $5 per acre.

No. 39. 111 acres, 4 miles from town, near the railroad, all in wood, in marl region. Price $10 per acre

No. 40. 286 acres on James River, 3½ miles from Smithfield in Isle of Wight county, beautifully situated; good dwellings and out-buildings, within 200 yards of the landing, where the finest fish are caught all the year, excellent oyster flats, &c.; good apple and Peach orchards; a most desirable place for raising fruits and truck for the northern markets. Price $3,600.

No. 41. 240 acres 20 miles west of Richmond, with two large dwellings—the land is good and the situation very healthy. Will be sold very low.

No. 42. 426 acres half open, in Charles City, near an excellent wharf on James River, where steamboats stop daily, and very near a settlement of Jersymen. The buildings are good and the land excellent. Price $12 per acre.

No 43. 400 acres in Gloucester county with good house and out buildings, 200 acres cleared, marl in every field—200 acres in heavy timber, within two miles of a good landing. Price, $2,000.

No. 44. 533 acres on Pamunkey river, in King William county, 150 acres cleared—much of the balance heavily timbered with white oak and ash—will be sold at a great bargain.

No. 45. 440 acres 5½ miles south of Petersburg—150 acres open, the balance in timber; good meadow land, well watered with fine springs; good dwelling and out houses, ¾ of a mile from the railroad. Price $2,700.

No. 46. 500 acres on the public road from Petersburg to Surry, 15 miles from town; the larger portion open, and part of it now productive of tobacco, wheat, corn and cotton; plenty of good marl, buildinngs comfortable. Price $3 per acre. Also an adjoining property with better buildings.

No. 47. 220½ acres 15 miles south of Petersburg, on a public stage road, all in very heavy heart pine of superior quality, hickory and oak—the soil is excellent; plenty of cleared land can be had adjoining—it is 3 miles from the Railroad. Price $1,000.

No. 48. 521 acres, about 200 acres in cultivation, all marled and producing fair crops, good brick house and good out buildings; marl in the greatest abundance; much good timber and wood. It is bounded on one side by a navigable creek; is only 2 miles from a good wharf on James River, where steamboats stop every day, and 2 miles from Surry Court House. Price $3,500.

No. 49. 600 acres, 1 mile from Surry Courthouse, 4½ miles from James River; 300 acres open, all marled, most in clover, and now productive of good crops of wheat and corn; good 2 story dwelling; abundance of marl; good springs; much good timber and wood. Price about $5,000.

No. 50. 500 acres, all in wood, adjoining the above; it will cut 30 cords of wood per acre, and is within 1½ miles of a landing Price $3,000.

No. 51. 585 acres adjoining the above; 150 acres open; 250 in virgin growth. 1½ miles from Surry Courthouse. It is well watered, and has abundance of marl; a public road divides the tract, and each part has an old house upon it. Price $4 per acre.

No. 52. 793 acres, 3 miles from Cabin Point, and 5 miles from James River; 250 acres cleared; plenty of good marl; a good 2 story dwelling and out buildings; a good mill seat and old mill; much good timber and wood. Price $5,000.

No. 53. 470 acres, 4 miles from Surry Courthouse, adjoining Swan's Point on James River; about 150 acres in cultivation, all marled; plenty of marl; a good landing on Cross Creek, which bounds one side of the farm, dividing it from No. 48. Game and fish are abundant. An excellent two story dwelling, out houses and garden; good springs, &c. Price about $3,500.

No. 54. 724 acres near Williamsburg, Va.; 400 acres in oak and pine timber on a navigable stream; abundance of marl. Most of the open land has been improved, and produces good crops of corn, wheat, clover, &c., &c. The buildings are comfortable; terms accommodating. Also, a valuable Manufacturing Mill within six miles of the above land.

No. 55. 7,000 acres on James River, in Charles City county, near 3,000 acres in cultivation, and highly improved. The soil is of first quality, and now bears from 25 to 30 bushels of wheat; 50 to 60 bushels of corn per acre. There are numerous dwellings, barns and mills, all in excellent order. The timber is unsurpassed. Upwards of 3,000 acres are in virgin growth, of excellent white oak for ship building, and heart pines of the largest size and best quality. Many of the trees being from 3 to 4 feet in diameter, and from 50 to 75 feet to the first branch. This estate fronts on the James River for 6 to 8 miles. There is an excellent wharf, where vessels drawing 16 feet water, lie afloat at low tide; and the steamboats to and from Baltimore, Norfolk, Petersburg and Richmond stop daily. This estate is worthy the attention of agriculturists, ship builders and lumber men. It will be sold either altogether or in portions to suit purchasers, and the terms will be very accommodating. A map of the whole will soon be prepared.

No. 56. 213½ acres, about half in cultivation, and in good order, 1 mile from Surry Courthouse, and 3 miles from Carter's Wharf, on James River, where the steamboats stop every day. It has on it 1,000 cords of wood, within 1½ miles of a good landing; plenty of marl. The buildings are in good order. The dwelling is 30 feet square, with 2 rooms and a passage on the first floor, 4 rooms above and a finished basement. Vessels from New York, &c., come here every spring for early fruits, potatoes, &c. Price $1,500, cash.

The subscriber earnestly invites the attention of his friends, and all who are seeking new homes and profitable investments, to these properties, and others which he has in his care. Believing that this region possesses substantial advantages over any other part of the United States, in climate, soil, low prices of land, navigation, and facilities for travel and transportation of produce to the best markets, he invites a thorough examination, and promises every aid in his power.

All post-paid letters will be promptly answered

Petersburg, Va., 4 mo., 9th, 1849. SAMUEL S. GRISCOM.

Monroe Nursery,

RIDGE ROAD, SIX MILES WEST OF ROCHESTER.

THE undersigned, proprietor of the above well known establishment, takes this opportunity of returning thanks to his friends and the public for their liberal patronage last spring. He offers this fall, a complete assortment of Nursery Productions—(he does not presume to say that he has a larger stock than his nursery friends, but he has as good)—at greatly reduced prices, and warranted correct. His Cherry Trees are particularly fine, of three years growth, and 8 to 10 feet high.

He would invite all about making purchases of trees, &c., this fall, to come and examine his stock previous to looking elsewhere.

The public is again notified that N. Goodsell is not employed by him CHARLES POWIS.

Greece, N. Y., Oct. 1, 1849. [10-2m]

BAGS!—at 12 Buffalo-Street.

I WOULD respectfully call the attention of farmers, millers, forwarders, &c., to my assortment of BAGS and BAGGING. I have every variety of Bags, from 18c. upwards. Call and see, and be satisfied. Also, a good assortment of Halter Rope, Cordage and Twine, of every description. E. C. WILLIAMS,

[9-tf] Ship Chandler and Sail Maker, No. 12 Buffalo-st.

Buffalo Nursery and Horticultural Garden.

THE Proprietor of this old establishment offers for sale a very large assortment of FRUIT AND ORNAMENTAL TREES, FLOWERING SHRUBS, &c. The Fruit Trees are very vigorous and healthy. His whole stock has been propagated with the greatest care, and mostly from bearing trees, growing on his own grounds.

Apple Trees of some fifty of the most choice sorts, including Northern Spy, Roxbury Russet, &c., &c., by the thousand at very reduced prices. Dwarf Pears, a fine assortment of beautiful trees. *No fire-blight in these nurseries.* 8,000 Peach Trees, of the very best sorts; fine trees and free from all disease. Cherries; a fine collection grown with low heads Also, a good assortment of the Plum, Pear, Apricot, Nectarine, Quince, and all the smaller fruits.

The assortment of Ornamental Trees, Flowering Shrubs, &c., comprises almost every desirable article. Annual importations are made from Europe of new and rare varieties of Fruits, Roses, &c Apple, Pear, Quince and Plum STOCKS by the quantity, and Nurserymen supplied with trees of large or small size at low prices.

Orders by mail or otherwise, and letters of inquiry will receive prompt attention. Every article carefully labelled, securely packed and forwarded agreeable to order, and with the least possible delay.

☞ Descriptive Catalogues sent gratis to all who apply (post paid,) and every article will be sold at the lowest nursery prices.

Buffalo, N. Y., Sept. 1 1849. B. HODGE.

Walworth Nursery.

GREAT INDUCEMENTS TO PURCHASE FRUIT TREES.—I propose to sell at my extensive Nursery about 20,000 good thrifty grafted Apple Trees four years old, at very reduced prices by the thousand. Being engaged in other business that requires mostly my attention the present season, I am disposed to offer rare inducements to those who wish to purchase in large quantities.

The Apples consist mainly of Baldwin, Rhode Island Greening, Roxbury and Golden Russets, Esopus Spitzenburg, Talman Sweeting, Golden Sweeting, and many other sorts in smaller proportions.

Also, for sale a good assortment of Pear, Cherry and Peach Trees of the most desirable sorts. G. T. YEOMANS.

Walworth, Wayne Co., N. Y., 1849. [10-1*]

Seeds and Implements.

GENESEE SEED STORE AND AG. WAREHOUSE—Irving Hall, opposite the Eagle Hotel, Buffalo-st.—Having purchased the Agricultural and Seed department of Messrs. Nott, Elliott & Fitch, we intend going more extensively into all the branches of our business. We shall keep constantly for sale, all kinds of Imported and American Field and Garden Seeds, and a large assortment of the most approved Implements and Machines used by the Gardener and Farmer. We manufacture Pennock's Wheat Drill, (the most perfect and substantial Drill in use,) the celebrated Massachusetts Eagle C Plow, Drags, Cultivators, &c., &c., all of the most approved patterns and construction, and keep a full supply of all the Boston and Worcester Plows, Sub-soil, Delano's, Burrall's Shell Wheel, Anthony's Patent Index, &c., &c.

In addition to our stock of implements, &c., we think we can say with perfect confidence, we have one of the largest, most carefully grown and best selected stock of FIELD, GARDEN and FLOWER SEEDS in the country, including several kinds imported from Europe. Farmers, Gardeners and Dealers would consult their interest, and perhaps insure good crops, by calling at our establishment. RAPALJE & BRIGGS.

Rochester, May 1, 1849.

Palmer's Wheat Drill.

THE subscribers have made an arrangement with Mr. Palmer to manufacture for the coming season five hundred of his new Wheat Drill, to be be sold in Western New-York. They are now receiving orders for them, and relying upon heavy sales, have determined to sell them at a SMALL PROFIT—at least twenty-five dollars less than any other drill capable of performing as much. The Drills are constructed under the immediate direction of the inventor, and *Warranted*

An agricultural implement as important as this should be afforded at a rate that places it within the reach of every farmer. To accomplish this Mr. Palmer has spared no pains to become acquainted with all the Drills in use by consulting both English and American Agricultural works, and by procuring copies of inventor's claims, issued or pending in the Patent Office. He has used different kinds of drills for the past years, and has learned by practice the wants of the farmer. After repeated efforts and expensive experiments he has produced a simple, substantial Drill, which by way of eminence he calls a "WHEAT DRILL." It is vastly superior to the costly and complicated machines heretofore in use. This is the third Drill he has invented, and he has now brought it to that state of perfection beyond which it cannot be carried. It is the Ne Plus Ultra of Drills, combining all the advantages of every other, and free from their imperfections.

We challenge the world to produce a Drill equal to this in durability, operation or price!! ☞ All orders should be sent in or delivered to one of our agents as early as July to secure attention. J. A. HOLMES & CO.

Brockport, March 15, 1849.

MOUNT HOPE GARDEN AND NURSERIES,

ROCHESTER, N. Y.

THE proprietors invite the attention of Fruit Growers, Nurserymen, and dealers in trees to their present stock now offered for sale. By recent large importations from Europe, and an extensive scale of propagation at home, we have obtained a stock of nursery articles as complete as any in the country, and we offer them to purchasers on the most liberal conditions.

The well known health, vigor and hardiness of the trees raised here, and the undivided and scrupulous attention given to every department by the propietors in person, offer great inducements to purchasers.

STANDARD FRUIT TREES,

Consisting of all the best varieties of the *Apple, Pear, Plum, Cherry, Peach, &c.*, of suitable age and size for orchard planting. The principal stock is made up of the well known popular sorts, but all the new American and foreign kinds are in our possession, and can be furnished.

PYRIMIDAL AND DWARF TREES,

Consisting of select varieties of Pears on Quince, Apples on Paradise, and Cherries on St. Lucie, or Mahaleb stocks, for gardens, and limited grounds; and for nurserymen and others who wish to obtain fruit from their trees at an early day. We have for many years given special attention to this department, and therefore believe we have probably the largest and best stock in the Union.

GOOSEBERRIES, RASPBERRIES, CURRANTS, ETC.

Of these we have a large and complete assortment, and can supply them by the 100 or 1000. The best English Gooseberries are imported every year. All the new Currants can be supplied.

ORNAMENTAL TREES, SHRUB ROSES, ETC.

All the leading sorts, such as Horse Chesnut, Mountain Ash, Ailantus, &c., can be furnished by the 1000 or 10,000 at much below ordinary rates—besides a large collection of new and rare Trees Shrubs, Roses, &c., recently imported.

HEDGE PLANTS.

Buckthorn 2, and 3 years from seed; Osage Orange, 1 and 2 years; Privet; besides Evergreens, such as Red Cedar, Hemlock, Norway Spruce, Arbor Vitæ, &c., can be furnished to any extent required.

STOCKS AND YOUNG WORKED TREES FOR NURSERYMEN.

Pear Seedlings, 1 and 2 years transplanted; Plum do., 2 years from seed bed; Paradise Stocks, for Dwarf Apples; Mazzard Cherry Seedlings, 1 year; St. Lucie, or Mahaleb Stocks, for dwarf Cherries; Quince Stocks, of sorts commonly used.

Young worked trees for distant transportation.

NEW UPRIGHT QUINCE the most easily propagated, and freest grower. We have now obtained a pretty large stock, and can supply them in moderate quantities.

Wholesale Priced Lists and General Catalogues forwarded to all post-paid applications.

Sep 1, 1849. ELLWANGER & BARRY.

Albany Agricultural Warehouse,

No. 369 & 371 SOUTH BROADWAY.

THE Subscriber having during the past season suffered in common with many of his fellow citizens—his warehouse being consumed, &c.—has procured the spacious new store erected for his business, No. 369 and 371 South Broadway, where he has an extensive assortment of all the best and leading AGRICULTURAL IMPLEMENTS and MACHINES in use From his long and successful experience in the manufacture and sale of articles in his line, he flatters himself that he can suit the wants of the farming public to the best of its kind, and on as favorable terms as any other manufacturer in the States.

Among his assortment are his celebrated Horse Powers, Threshing Machines and Separators.

Smith's Patent Cornshellers for horse power.

Clinton Hand Shellers, single and double hopper; Grant's Patent Premium Fanning Mills, for power and hand, &c, &c.

Also, a complete assortment of Garden, Field and Grass Seeds.

[9-tf] H. L. EMERY.

DR. KITTRIDGE'S

CELEBRATED SPRAIN & RHEUMATIC LINIMENT.

NO better preparation was ever offered to the public for the following complaints:—Rheumatism, Lame Backs, Bruises, Sprains, Stiff or Contracted Tendons, Swellings, Stiff Neck, Nervous Headache, Earache, &c

This Liniment is likewise excelled by none in its use upon Horse and other Animal Flesh, for curing Spavins, Sprains, Sweenies, Galls and all flesh wounds.

Price Fifty Cents per bottle. Prepared and sold, wholesale and retail, by A. GRANT,

No. 43 Exchange-st., Rochester, N. Y.

AGENTS—Isaac Mitchell, East Bloomfield; S. D. Lundy, Waterloo; W. P. Matison & Co., Seneca Falls; E. W. Cheney & Sons, Canandaigua; Clark & Pierce, Livonia; H. Tilton, Moscow; Whitney & Laflin, Mt. Morris; Ely & Co., Clyde.

October 1, 1849. [10-tf]

Agricultural Books.—A large assortment of Books on Agriculture, Horticulture, &c., for sale at this Office.

CONTENTS OF THIS NUMBER.

Analysis of Maize, or Indian Corn..... 225
Agricultural Chemistry..... 226
Fair of the N. Y. State Agricultural Society..... 228
Thorough Draining, (illustrated and described,)..... 229
Castor Oil Bean—(Ricinus Communis,)..... 231
Hints for October..... 232
Premiums Awarded at State Fair..... 232
Farming Lands in Eastern Virginia..... 234
Lands in Western New York and Virginia—Comparative value of Rich and Poor Soils..... 235
The Plow—its History and Improvements, and Principles involved in its Construction and Operation..... 236
Important Discovery about Peat..... 247
Mediterranean Wheat; Onondaga Salt..... 237
Circular from the Patent Office..... 238
Death of Mr. Bates, and Sale of his Herd of Short-horns..... 239
American Butter in England..... 239
Rule for constructing Chimneys; Shoeing Horses..... 239
Too hot for the Apples; Munificent Bequest..... 239
Lard Lamps—improvement in making..... 240
To render Cloth, Silk, &c. water proof; To preserve Clothes..... 240
Warts, Wens and Tumors on Animals..... 240
To Cure a Biting Horse..... 240
Time for taking Sheep from Pastures..... 240
Gestation..... 240
Editor's Table—Notices, &c..... 245

HORTICULTURAL DEPARTMENT.

Description of Two New and Fine Pears..... 241
State Fair and Pomological Convention at Syracuse..... 241
Review of the American Fruit Culturist..... 242
Fall Planting of Trees..... 243
The Bailey (or Edgerly) Sweet Apple..... 244
Pear Tree Blight..... 244
Notes on Cherries; Culture of the Plum..... 424

ILLUSTRATIONS.

Nine figures illustrative of Draining..... 229
Drain Tile..... 229
Figure Illustrating Draft of the Plow..... 236
Five figures showing position of Plow in operation, line of draft, Dial Clevis, &c..... 237
Mamelonee Plum..... 241
Reine Claude Bavay Plum..... 241

Market Prices of Agricultural Products.

New York, Sept. 24.

Ashes.—Market very firm with a good demand, but sales are restricted owing to a limited receipt. Pots firm at $7 and Pearls steady at $6 50.

Cotton.—Rather better on the medium grades. In some instances ⅛c better. Sales 3.000 bales.

Flour & Meal—Market for Western and State Flour is again 6d better with a good eastern and home demand, particularly for new western. Moderate demand for inferior grades for export, and for this description the market is unchanged Sales 6,000 bbls at $3a4 for uninspected fine. 4 87 *a* $5 for common State and mixed Mich. old, $5a5 12 strait State and old Western. 5 18a5 31 for new Michigan 5 31a5 44 pure Genesee. Sales 140 bbls Jersey Meal at 3 18.

Grain.—Market better for Wheat. Sales 3.300 bush prime Genesee at 1 20a1 21. 1200 bu inferior Chicago at about 67 and a cargo of new southern on private terms. Corn 18.000 bu at 58a59 western mixed. 60a61 flat and round yellow. Oats 37a38 for old, and 35a36 for Jersey.

Provisions.—Ohio pork is heavy with a fair demand from the trade: sales 800 bbls at 10 for mess and 8 50 for prime, and 9 12 sour mess. Dressed hogs in good demand at 6a7c. Lard heavy with fair demand; sales 700 bls at 6a7 for good to prime. Beef steady; sales 250 bls at 13a14, for mess and 75 bls prime at 9 50. Butter heavy. Ohio 7a10 and 10a14 for state. Cheese saleable at 4a6 and arriving freely.

To Advertisers.—The Publisher of the Farmer begs to remind all interested, that his terms for advertising, as well as subscription, are *cash in advance*. Those who wish to avail themselves of the superior advantages of the Farmer as an advertising medium, should send requisite payment with their orders, *to secure attention and insertion*; and those whose notices do not appear, will, with this explanation, understand the reason.

In most cases, in which we have, in order to accommodate distant friends, (?) published notices without a rigid adherence to advance terms, vexation and loss have been our reward for the favor extended. We have hundreds of dollars due us, which we are unable to collect by ordinary means Many to whom we send bills, requesting payment, give the matter no attention whatever—and thus, after being *largely benefitted* by our extensive circulation, either *refuse* or *neglect* to be———. This is pleasant—very. However, some of these silent gentlemen may possibly soon receive a benefit through the pages of the Farmer in the shape of an *entirely gratuitous and conspicuous notice*—the only way perhaps in which we can square accounts!

Back numbers and volumes of the Farmer promptly supplied to agents and new subscribers.

Patent Improved Railroad Horse-Power and Overshot Thresher and Separator.

THIS Power & Thresher, which has been so long before the public, and given such perfect and universal satisfaction, has met with such a constant and rapidly increasing sale, that other manufacturers sometimes adopt headings similar to those of my advertisement—and, in some cases, parts of the advertisements themselves—which, if not observed, may lead to mistakes, and purchasers may get, instead of the machine which has earned the reputation, one of a different construction.

The machine has been much improved, and no pains or expense is spared to make it in the most thorough and durable manner, as we have the greatest facilities as to power, room and materials at our command. It is the cheapest, simplest, most durable and portable set of machinery for the purpose in use, and warranted in every case to give satisfaction to the purchaser. For further particulars see my advertisements in the agricultural papers of the United States and Canada. Catalogues and circulars furnished gratis on application by mail.

HORACE L. EMERY,
Agricultural Warehouse, 369 & 371, Broadway, Albany, N. Y.

Improved Horse Power, Thrasher, &c.

ALLEN'S IMPROVED PORTABLE RAIL-ROAD HORSE POWER AND OVERSHOT THRASHER AND SEPARATOR.—The superiority of this Power consists in the facility of driving a machine in either direction without crossing the belt by the use simply of an additional pinion. There is less friction in this Power than in any other of similar construction, it consequently works easier and will last longer. The materials are all of the best kind, and put together on the best principles and in the most workmanlike manner. Powers for the past ten years have been made on nearly the same principles as the above, and have given general satisfaction. All are warranted to work well.

Thrashers both Over and Under-shot. Separators with fixtures, &c.

A. B. ALLEN & CO.,
Agricultural Warehouse & Seed Store,
[10-1m] Nos. 189 & 191 Water-st., New York.

Improved Well and Cistern Pumps.

DOWNS, MYNDHERSE & CO., of Seneca Falls, N. Y., would call the attention of Hardware Merchants and all others who have occasion to deal in or use suction pumps, to their *CAST IRON, REVOLVING SPOUT AND CISTERN PUMPS*, for which they have obtained Letters Patent of the United States. For particular description and figures of our Pump, see August number of the Genesee Farmer, page 181. [9-tf]

Tents for County Fairs, &c.

TWO Splendid PAVILLIONS of the following dimensions—one 90 by 50 feet, and the other 50 feet in diameter. These tents are new, and impervious to water, and can be erected in two hours. The largest one will convene from 1,000 to 1,200 persons.

E. C. WILLIAMS,
[10-1t] 12 Buffalo-st., Rochester, N. Y.

A Small Farm Wanted.

A Letter addressed to C. S., Newport, N. Y., describing the premises, and mentioning the terms, will receive attention.
August, 1849. [8—3t*.

THE GENESEE FARMER,

Published on the first of each month, at Rochester, N. Y., by
D. D. T. MOORE, PROPRIETOR.

DANIEL LEE & D. D. T. MOORE, Editors.

P. BARRY, Conductor of Horticultural Department.

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Advertisements.—A limited number of short and appropriate advertisements will be given in the Farmer, at the rate of $1,50 per square or folio (ten lines or 100 words) for the first insertion, and $1 for each subsequent publication—in advance. The circulation of the Farmer is from five to eight thousand larger than that of any other agricultural journal published in the United States.

☞ Advertisements, notices, &c. should be forwarded on or before the 15th of the preceding month, to secure insertion in any specified number.

☞ The Farmer is subject to newspaper postage only.

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